

**FULL ENVIRONMENTAL ASSESSMENT FORM  
(PARTS 1 & 2)**

**FIELD HOME ACTIVE-ADULT  
COMMUNITY DEVELOPMENT**

**2300 CATHERINE STREET  
TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK**



**DATED: FEBRUARY 16, 2024**

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**ATTACHMENTS TO FULL-EAF NARRATIVE  
FIELD HOME ACTIVE ADULT COMMUNITY DEVELOPMENT**

**TRAFFIC IMPACT STUDY (UNDER SEPARATE COVER)**

## **PROJECT CONTRIBUTORS:**

**ADS ENVIRONMENTAL SERVICES  
CMG ENGINEERING, SURVEYING, LANDSCAPE ARCHITECTURE  
COLLIERS ENGINEERING & DESIGN  
CRONIN & CRONIN, LAW FIRM, PLLC  
SITE DESIGN CONSULTANTS  
TOLL BROTHERS (APPLICANT)  
ZARIN & STEINMETZ, LLP**



**FULL-ENVIRONMENTAL ASSESSMENT FORM (PART 1)**

**Full Environmental Assessment Form**  
**Part 1 - Project and Setting**

**Instructions for Completing Part 1**

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

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

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

**A. Project and Applicant/Sponsor Information.**

Name of Action or Project:		
Project Location (describe, and attach a general location map):		
Brief Description of Proposed Action (include purpose or need):		
Name of Applicant/Sponsor:		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Project Contact (if not same as sponsor; give name and title/role):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

**B. Government Approvals**

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

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees <input type="checkbox"/> Yes <input type="checkbox"/> No		
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input type="checkbox"/> No		
c. City, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources. <ul style="list-style-type: none"> <li data-bbox="121 829 1485 861">i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li data-bbox="121 892 1485 924">ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> <li data-bbox="121 924 1485 955">iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input type="checkbox"/> No</li> </ul>		

**C. Planning and Zoning**

**C.1. Planning and zoning actions.**

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

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

**C.2. Adopted land use plans.**

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

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

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

If Yes, identify the plan(s):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

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

If Yes, identify the plan(s):

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**C.3. Zoning**

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance.  Yes  No  
If Yes, what is the zoning classification(s) including any applicable overlay district?

\_\_\_\_\_

\_\_\_\_\_

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

c. Is a zoning change requested as part of the proposed action?  Yes  No

If Yes,

i. What is the proposed new zoning for the site? \_\_\_\_\_

**C.4. Existing community services.**

a. In what school district is the project site located? \_\_\_\_\_

b. What police or other public protection forces serve the project site?  
\_\_\_\_\_

c. Which fire protection and emergency medical services serve the project site?  
\_\_\_\_\_

d. What parks serve the project site?  
\_\_\_\_\_  
\_\_\_\_\_

**D. Project Details**

**D.1. Proposed and Potential Development**

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

b. a. Total acreage of the site of the proposed action? \_\_\_\_\_ acres  
b. Total acreage to be physically disturbed? \_\_\_\_\_ acres  
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? \_\_\_\_\_ acres

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

d. Is the proposed action a subdivision, or does it include a subdivision?  Yes  No  
If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)  
\_\_\_\_\_

ii. Is a cluster/conservation layout proposed?  Yes  No

iii. Number of lots proposed? \_\_\_\_\_

iv. Minimum and maximum proposed lot sizes? Minimum \_\_\_\_\_ Maximum \_\_\_\_\_

e. Will the proposed action be constructed in multiple phases?  Yes  No

i. If No, anticipated period of construction: \_\_\_\_\_ months A single phase project;

ii. If Yes:

- Total number of phases anticipated \_\_\_\_\_
- Anticipated commencement date of phase 1 (including demolition) \_\_\_\_\_ month \_\_\_\_\_ year
- Anticipated completion date of final phase \_\_\_\_\_ month \_\_\_\_\_ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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

	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)?  Yes  No  
 If Yes,

i. Total number of structures \_\_\_\_\_

ii. Dimensions (in feet) of largest proposed structure: \_\_\_\_\_ height; \_\_\_\_\_ width; and \_\_\_\_\_ length

iii. Approximate extent of building space to be heated or cooled: \_\_\_\_\_ square feet

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage?  Yes  No  
 If Yes,

i. Purpose of the impoundment: \_\_\_\_\_

ii. If a water impoundment, the principal source of the water:  Ground water  Surface water streams  Other specify: \_\_\_\_\_

iii. If other than water, identify the type of impounded/contained liquids and their source.  
 \_\_\_\_\_

iv. Approximate size of the proposed impoundment. Volume: \_\_\_\_\_ million gallons; surface area: \_\_\_\_\_ acres

v. Dimensions of the proposed dam or impounding structure: \_\_\_\_\_ height; \_\_\_\_\_ length

vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete):  
 \_\_\_\_\_

**D.2. Project Operations**

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both?  Yes  No  
 (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) As with most land development, cut & fill will take place, all material will remain on-site.  
 If Yes:

i. What is the purpose of the excavation or dredging? \_\_\_\_\_

ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?

- Volume (specify tons or cubic yards): \_\_\_\_\_
- Over what duration of time? \_\_\_\_\_

iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them.  
 \_\_\_\_\_  
 \_\_\_\_\_

iv. Will there be onsite dewatering or processing of excavated materials?  Yes  No  
 If yes, describe. \_\_\_\_\_  
 \_\_\_\_\_

v. What is the total area to be dredged or excavated? \_\_\_\_\_ acres

vi. What is the maximum area to be worked at any one time? \_\_\_\_\_ acres

vii. What would be the maximum depth of excavation or dredging? \_\_\_\_\_ feet

viii. Will the excavation require blasting?  Yes  No

ix. Summarize site reclamation goals and plan: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area?  Yes  No  
 If Yes:

i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): \_\_\_\_\_  
 \_\_\_\_\_

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

iii. Will the proposed action cause or result in disturbance to bottom sediments? Yes  No

If Yes, describe: \_\_\_\_\_

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

If Yes:

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

v. Describe any proposed reclamation/mitigation following disturbance: \_\_\_\_\_

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

If Yes:

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

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

If Yes:

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

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

If Yes:

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

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

If Yes:

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

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

vi. If water supply will be from wells (public or private), what is the maximum pumping capacity: \_\_\_\_\_ gallons/minute.

d. Will the proposed action generate liquid wastes?  Yes  No

If Yes:

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

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

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

If Yes:

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

The Town Engineer is currently reviewing the proposed facility connections and operations to confirm the adequacy of the system.



• Do existing sewer lines serve the project site?  Yes  No  
 • Will a line extension within an existing district be necessary to serve the project?  Yes  No  
 If Yes: (See Full-EAF Project Narrative, Part 2 Item 4)  
 • Describe extensions or capacity expansions proposed to serve this project: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

iv. Will a new wastewater (sewage) treatment district be formed to serve the project site?  Yes  No  
 If Yes:  
 • Applicant/sponsor for new district: \_\_\_\_\_  
 • Date application submitted or anticipated: \_\_\_\_\_  
 • What is the receiving water for the wastewater discharge? \_\_\_\_\_

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

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

e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction?  Yes  No  
 If Yes:  
 i. How much impervious surface will the project create in relation to total size of project parcel?  
     \_\_\_\_\_ Square feet or \_\_\_\_\_ acres (impervious surface)  
     \_\_\_\_\_ Square feet or \_\_\_\_\_ acres (parcel size)  
 ii. Describe types of new point sources. \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?  
 \_\_\_\_\_  
 \_\_\_\_\_  
 • If to surface waters, identify receiving water bodies or wetlands: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

• Will stormwater runoff flow to adjacent properties?  Yes  No

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

f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations?  Yes  No  
 If Yes, identify:  
 i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)  
 \_\_\_\_\_  
 ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)  
 \_\_\_\_\_  
 iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)  
 \_\_\_\_\_  
 \_\_\_\_\_

g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit?  Yes  No  
 If Yes:  
 i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year)  Yes  No  
 ii. In addition to emissions as calculated in the application, the project will generate:  
 • \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide (CO<sub>2</sub>)  
 • \_\_\_\_\_ Tons/year (short tons) of Nitrous Oxide (N<sub>2</sub>O)  
 • \_\_\_\_\_ Tons/year (short tons) of Perfluorocarbons (PFCs)  
 • \_\_\_\_\_ Tons/year (short tons) of Sulfur Hexafluoride (SF<sub>6</sub>)  
 • \_\_\_\_\_ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflouorocarbons (HFCs)  
 • \_\_\_\_\_ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)?  Yes  No  
 If Yes:  
 i. Estimate methane generation in tons/year (metric): \_\_\_\_\_  
 ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): \_\_\_\_\_

---

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations?  Yes  No  
 If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): \_\_\_\_\_

---

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services?  Yes  No  
 If Yes: (See Full-EAF Project Narrative, Part 2 Item 13)  
 i. When is the peak traffic expected (Check all that apply):  Morning  Evening  Weekend  
 Randomly between hours of \_\_\_\_\_ to \_\_\_\_\_ and 5:00 pm to 6:00 pm.  
 ii. For commercial activities only, projected number of truck trips/day and type (e.g., semi trailers and dump trucks): \_\_\_\_\_  
 iii. Parking spaces: Existing \_\_\_\_\_ Proposed \_\_\_\_\_ Net increase/decrease \_\_\_\_\_  
 iv. Does the proposed action include any shared use parking?  Yes  No  
Proposed 118 units @ 0.5 spaces/dwelling unit = 59 spaces; 236 total standard to be provided;  
 v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe:  
 New internal roadway system with driveways provided for each of the 118 units, along with common roadway and parking areas for recreation center.  
 vi. Are public/private transportation service(s) or facilities available within 1/2 mile of the proposed site?  Yes  No  
 vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles?  Yes  No  
 viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes?  Yes  No

---

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy?  Yes  No  
 If Yes:  
 i. Estimate annual electricity demand during operation of the proposed action: \_\_\_\_\_  
 ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): \_\_\_\_\_  
 iii. Will the proposed action require a new, or an upgrade, to an existing substation?  Yes  No

---

l. Hours of operation. Answer all items which apply.  
 i. During Construction:  
 • Monday - Friday: \_\_\_\_\_  
 • Saturday: \_\_\_\_\_  
 • Sunday: \_\_\_\_\_  
 • Holidays: \_\_\_\_\_  
 ii. During Operations:  
 • Monday - Friday: \_\_\_\_\_  
 • Saturday: \_\_\_\_\_  
 • Sunday: \_\_\_\_\_  
 • Holidays: \_\_\_\_\_

m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both?  Yes  No  
 (See Full-EAF Project Narrative, Part 2 Item 15)  
 If yes:  
 i. Provide details including sources, time of day and duration:  
 \_\_\_\_\_  
 \_\_\_\_\_

ii. Will the proposed action remove existing natural barriers that could act as a noise barrier or screen?  Yes  No  
 Describe: \_\_\_\_\_  
 \_\_\_\_\_

---

n. Will the proposed action have outdoor lighting?  Yes  No  
 If yes: The proposed system will comply with Town Code, Chapter 200, Lighting:  
 i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:  
 \_\_\_\_\_  
 \_\_\_\_\_

ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen?  Yes  No  
 Describe: \_\_\_\_\_  
 \_\_\_\_\_  
 Lighting systems will comply with Town Code, Chapter 200, Lighting, Outdoor.

---

o. Does the proposed action have the potential to produce odors for more than one hour per day?  Yes  No  
 If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

---

p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage?  Yes  No  
 If Yes:  
 i. Product(s) to be stored \_\_\_\_\_  
 ii. Volume(s) \_\_\_\_\_ per unit time \_\_\_\_\_ (e.g., month, year)  
 iii. Generally, describe the proposed storage facilities: \_\_\_\_\_  
 \_\_\_\_\_

---

q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation?  Yes  No  
 If Yes:  
 i. Describe proposed treatment(s):  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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

---

r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)?  Yes  No  
 If Yes:  
 i. Describe any solid waste(s) to be generated during construction or operation of the facility:  
 • Construction: \_\_\_\_\_ tons per \_\_\_\_\_ (unit of time)  
 • Operation : \_\_\_\_\_ tons per \_\_\_\_\_ (unit of time)  
 ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:  
 • Construction: \_\_\_\_\_  
 \_\_\_\_\_  
 • Operation: \_\_\_\_\_  
 \_\_\_\_\_

iii. Proposed disposal methods/facilities for solid waste generated on-site:  
 • Construction: \_\_\_\_\_  
 \_\_\_\_\_  
 • Operation: \_\_\_\_\_  
 \_\_\_\_\_

s. Does the proposed action include construction or modification of a solid waste management facility?  Yes  No  
 If Yes:  
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): \_\_\_\_\_  
 ii. Anticipated rate of disposal/processing:  
 • \_\_\_\_\_ Tons/month, if transfer or other non-combustion/thermal treatment, or  
 • \_\_\_\_\_ Tons/hour, if combustion or thermal treatment  
 iii. If landfill, anticipated site life: \_\_\_\_\_ years

t. Will the proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste?  Yes  No  
 If Yes:  
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: \_\_\_\_\_  
 \_\_\_\_\_  
 ii. Generally describe processes or activities involving hazardous wastes or constituents: \_\_\_\_\_  
 \_\_\_\_\_  
 iii. Specify amount to be handled or generated \_\_\_\_\_ tons/month  
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: \_\_\_\_\_  
 \_\_\_\_\_  
 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility?  Yes  No  
 If Yes: provide name and location of facility: \_\_\_\_\_  
 \_\_\_\_\_  
 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:  
 \_\_\_\_\_  
 \_\_\_\_\_

**E. Site and Setting of Proposed Action**

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

a. Existing land uses.  
 i. Check all uses that occur on, adjoining and near the project site.  
 Urban  Industrial  Commercial  Residential (suburban)  Rural (non-farm)  
 Forest  Agriculture  Aquatic  Other (specify): \_\_\_\_\_  
 ii. If mix of uses, generally describe:  
 \_\_\_\_\_  
 \_\_\_\_\_

b. Land uses and covertypes on the project site.

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

c. Is the project site presently used by members of the community for public recreation?  Yes  No  
i. If Yes: explain: \_\_\_\_\_

---

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

---

e. Does the project site contain an existing dam?  Yes  No  
If Yes:  
i. Dimensions of the dam and impoundment:  

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

ii. Dam's existing hazard classification: \_\_\_\_\_  
iii. Provide date and summarize results of last inspection:  
\_\_\_\_\_

---

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

- If yes, cite sources/documentation: \_\_\_\_\_

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

---

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste?  Yes  No  
If Yes:  
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred:  
\_\_\_\_\_

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h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site?  Yes  No  
If Yes:  
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply:  Yes  No  
 Yes – Spills Incidents database Provide DEC ID number(s): \_\_\_\_\_  
 Yes – Environmental Site Remediation database Provide DEC ID number(s): \_\_\_\_\_  
 Neither database  
ii. If site has been subject of RCRA corrective activities, describe control measures: \_\_\_\_\_  
\_\_\_\_\_

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iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database?  Yes  No  
If yes, provide DEC ID number(s): \_\_\_\_\_  
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s):  
\_\_\_\_\_

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

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

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**E.2. Natural Resources On or Near Project Site**

a. What is the average depth to bedrock on the project site? \_\_\_\_\_ feet (See Full-EAF Project Narrative, Part 1, Item E.2.(a))

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

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

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

e. Drainage status of project site soils:  Well Drained: \_\_\_\_\_ % of site  
 Moderately Well Drained: \_\_\_\_\_ % of site  
 Poorly Drained \_\_\_\_\_ % of site

f. Approximate proportion of proposed action site with slopes:  0-10%: \_\_\_\_\_ % of site  
 10-15%: \_\_\_\_\_ % of site  
 15% or greater: \_\_\_\_\_ % of site

g. Are there any unique geologic features on the project site?  Yes  No  
 If Yes, describe: \_\_\_\_\_  
 \_\_\_\_\_

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h. Surface water features.

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

ii. Do any wetlands or other waterbodies adjoin the project site? East of H-31-P44, Trib. 3  Yes  No  
 If Yes to either *i* or *ii*, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency?  Yes  No  
 (Per 6NYCRR Part 864, east of H-31-P44-3)

iv. For each identified regulated wetland and waterbody on the project site, provide the following information: east of H-31-P44-3)

- Streams: Name \_\_\_\_\_ Classification \_\_\_\_\_
- Lakes or Ponds: Name \_\_\_\_\_ Classification \_\_\_\_\_
- Wetlands: Name \_\_\_\_\_ Approximate Size \_\_\_\_\_
- Wetland No. (if regulated by DEC) \_\_\_\_\_ 1.84 ac. buffer and 0.07 ac. wetlands, 1.91. ac disturbance.

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies?  Yes  No  
 If yes, name of impaired water body/bodies and basis for listing as impaired: \_\_\_\_\_  
 \_\_\_\_\_

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i. Is the project site in a designated Floodway?  Yes  No

j. Is the project site in the 100-year Floodplain?  Yes  No

k. Is the project site in the 500-year Floodplain?  Yes  No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer?  Yes  No  
 If Yes:  
 i. Name of aquifer: \_\_\_\_\_



m. Identify the predominant wildlife species that occupy or use the project site: _____ _____ _____	_____ _____ _____ Toad
n. Does the project site contain a designated significant natural community? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes:	
<i>i.</i> Describe the habitat/community (composition, function, and basis for designation): _____ _____	
<i>ii.</i> Source(s) of description or evaluation: _____	
<i>iii.</i> Extent of community/habitat:	
<ul style="list-style-type: none"> <li>• Currently: _____ acres</li> <li>• Following completion of project as proposed: _____ acres</li> <li>• Gain or loss (indicate + or -): _____ acres</li> </ul>	
o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>	
If Yes: <span style="float: right;">(See Full-EAF Project Narrative, Part 2 Item 7)</span>	
<i>i.</i> Species and listing (endangered or threatened): _____ _____ _____	
p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>	
If Yes:	
<i>i.</i> Species and listing: _____ _____	
q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If yes, give a brief description of how the proposed action may affect that use: _____ _____	
<b>E.3. Designated Public Resources On or Near Project Site</b>	
a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes, provide county plus district name/number: _____	
b. Are agricultural lands consisting of highly productive soils present? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> <i>i.</i> If Yes: acreage(s) on project site? _____ <i>ii.</i> Source(s) of soil rating(s): _____	
c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes:	
<i>i.</i> Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature <i>ii.</i> Provide brief description of landmark, including values behind designation and approximate size/extent: _____ _____ _____	
d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> If Yes:	
<i>i.</i> CEA name: _____ <i>ii.</i> Basis for designation: _____ <i>iii.</i> Designating agency and date: _____	

<p>e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes: <span style="float: right;">(See Full-EAF Project Narrative, Part 2 Item 10)</span></p> <p style="margin-left: 20px;">i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District</p> <p style="margin-left: 20px;">ii. Name: _____</p> <p style="margin-left: 20px;">iii. Brief description of attributes on which listing is based: _____</p>
<p>f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>
<p>g. Have additional archaeological or historic site(s) or resources been identified on the project site? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe possible resource(s): _____</p> <p style="margin-left: 20px;">ii. Basis for identification: _____</p>
<p>h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Identify resource: _____</p> <p style="margin-left: 20px;">ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____</p> <p style="margin-left: 20px;">iii. Distance between project and resource: _____ miles.</p>
<p>i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Identify the name of the river and its designation: _____</p> <p style="margin-left: 20px;">ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span></p>

**F. Additional Information**

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

**G. Verification**

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name \_\_\_\_\_ Date \_\_\_\_\_  
(Prior Submissions during Nov. 2022 & Aug. 2023)

Signature \_\_\_\_\_ Title \_\_\_\_\_

**Full Environmental Assessment Form**  
**Part 2 - Identification of Potential Project Impacts**

Project :

Date :

**Part 2 is to be completed by the lead agency.** Part 2 is designed to help the lead agency inventory all potential resources that could be affected by a proposed project or action. We recognize that the lead agency’s reviewer(s) will not necessarily be environmental professionals. So, the questions are designed to walk a reviewer through the assessment process by providing a series of questions that can be answered using the information found in Part 1. To further assist the lead agency in completing Part 2, the form identifies the most relevant questions in Part 1 that will provide the information needed to answer the Part 2 question. When Part 2 is completed, the lead agency will have identified the relevant environmental areas that may be impacted by the proposed activity.

If the lead agency is a state agency **and** the action is in any Coastal Area, complete the Coastal Assessment Form before proceeding with this assessment.

**Tips for completing Part 2:**

- Review all of the information provided in Part 1.
- Review any application, maps, supporting materials and the Full EAF Workbook.
- Answer each of the 18 questions in Part 2.
- If you answer “**Yes**” to a numbered question, please complete all the questions that follow in that section.
- If you answer “**No**” to a numbered question, move on to the next numbered question.
- Check appropriate column to indicate the anticipated size of the impact.
- Proposed projects that would exceed a numeric threshold contained in a question should result in the reviewing agency checking the box “Moderate to large impact may occur.”
- The reviewer is not expected to be an expert in environmental analysis.
- If you are not sure or undecided about the size of an impact, it may help to review the sub-questions for the general question and consult the workbook.
- When answering a question consider all components of the proposed activity, that is, the “whole action”.
- Consider the possibility for long-term and cumulative impacts as well as direct impacts.
- Answer the question in a reasonable manner considering the scale and context of the project.

<b>1. Impact on Land</b>			
Proposed action may involve construction on, or physical alteration of, the land surface of the proposed site. (See Part 1. D.1)		<input type="checkbox"/> NO	<input type="checkbox"/> YES
<i>If “Yes”, answer questions a - j. If “No”, move on to Section 2.</i>		(See Full-EAF Project Narrative, Part 2, Item 1)	
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may involve construction on land where depth to water table is less than 3 feet. Average depth to water table was confirmed to be 3.75-feet;	E2d	(NOT APPLICABLE) <input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may involve construction on slopes of 15% or greater.	E2f	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may involve construction on land where bedrock is exposed, or generally within 5 feet of existing ground surface.	E2a	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
d. The proposed action may involve the excavation and removal of more than 1,000 tons of natural material.	D2a	<input type="checkbox"/> *	<input type="checkbox"/>
e. The proposed action may involve construction that continues for more than one year or in multiple phases.	D1e	<input type="checkbox"/> 18-months	<input type="checkbox"/>
f. The proposed action may result in increased erosion, whether from physical disturbance or vegetation removal (including from treatment by herbicides).	D2e, D2q	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action is, or may be, located within a Coastal Erosion hazard area.	B1i	(NOT APPLICABLE) <input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

**\* Site work (cut & fill) will be balanced to the extent that no excess material will be exported from the site.**

<b>2. Impact on Geological Features</b> The proposed action may result in the modification or destruction of, or inhibit access to, any unique or unusual land forms on the site (e.g., cliffs, dunes, minerals, fossils, caves). (See Part 1. E.2.g) <span style="float: right;"><input type="checkbox"/> NO <input type="checkbox"/> YES</span> <i>If "Yes", answer questions a - c. If "No", move on to Section 3.</i> <span style="float: right;">(NOT APPLICABLE)</span>			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. Identify the specific land form(s) attached: _____ _____	E2g	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may affect or is adjacent to a geological feature listed as a registered National Natural Landmark. Specific feature: _____	E3c	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

<b>3. Impacts on Surface Water</b> The proposed action may affect one or more wetlands or other surface water bodies (e.g., streams, rivers, ponds or lakes). (See Part 1. D.2, E.2.h) <span style="float: right;"><input type="checkbox"/> NO <input type="checkbox"/> YES</span> <i>If "Yes", answer questions a - l. If "No", move on to Section 4.</i> (See Full-EAF Project Narrative, Part 2, Item 3)			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may create a new water body.	D2b, D1h	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
b. The proposed action may result in an increase or decrease of over 10% or more than a 10 acre increase or decrease in the surface area of any body of water.	D2b	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action may involve dredging more than 100 cubic yards of material from a wetland or water body.	D2a	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
d. The proposed action may involve construction within or adjoining a freshwater or tidal wetland, or in the bed or banks of any other water body.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may create turbidity in a waterbody, either from upland erosion, runoff or by disturbing bottom sediments.	D2a, D2h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may include construction of one or more intake(s) for withdrawal of water from surface water.	D2c	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
g. The proposed action may include construction of one or more outfall(s) for discharge of wastewater to surface water(s).	D2d	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
h. The proposed action may cause soil erosion, or otherwise create a source of stormwater discharge that may lead to siltation or other degradation of receiving water bodies.	D2e	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may affect the water quality of any water bodies within or downstream of the site of the proposed action.	E2h	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may involve the application of pesticides or herbicides in or around any water body.	D2q, E2h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may require the construction of new, or expansion of existing, wastewater treatment facilities.	D1a, D2d	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

I. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
		(NOT APPLICABLE)	

<b>4. Impact on groundwater</b> The proposed action may result in new or additional use of ground water, or may have the potential to introduce contaminants to ground water or an aquifer. <input type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. D.2.a, D.2.c, D.2.d, D.2.p, D.2.q, D.2.t) (See Full-EAF Project Narrative, Part 2, Item 4) <i>If "Yes", answer questions a - h. If "No", move on to Section 5.</i>			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may require new water supply wells, or create additional demand on supplies from existing water supply wells.	D2c	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
b. Water supply demand from the proposed action may exceed safe and sustainable withdrawal capacity rate of the local supply or aquifer. Cite Source: _____	D2c	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may allow or result in residential uses in areas without water and sewer services.	D1a, D2c	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
d. The proposed action may include or require wastewater discharged to groundwater.	D2d, E2l	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
e. The proposed action may result in the construction of water supply wells in locations where groundwater is, or is suspected to be, contaminated.	D2c, E1f, E1g, E1h	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
f. The proposed action may require the bulk storage of petroleum or chemical products over ground water or an aquifer.	D2p, E2l	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
g. The proposed action may involve the commercial application of pesticides within 100 feet of potable drinking water or irrigation sources.	E2h, D2q, E2l, D2c	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
h. Other impacts: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

<b>5. Impact on Flooding</b> The proposed action may result in development on lands subject to flooding. <input type="checkbox"/> NO <input type="checkbox"/> YES (See Part 1. E.2) (NOT APPLICABLE) <i>If "Yes", answer questions a - g. If "No", move on to Section 6.</i>			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may result in development in a designated floodway.	E2i	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in development within a 100 year floodplain.	E2j	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in development within a 500 year floodplain.	E2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in, or require, modification of existing drainage patterns.	D2b, D2e	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may change flood water flows that contribute to flooding.	D2b, E2i, E2j, E2k	<input type="checkbox"/>	<input type="checkbox"/>
f. If there is a dam located on the site of the proposed action, is the dam in need of repair, or upgrade?	E1e	<input type="checkbox"/>	<input type="checkbox"/>

g. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
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<b>6. Impacts on Air</b>			
The proposed action may include a state regulated air emission source. (See Part 1. D.2.f., D.2.h, D.2.g) <i>If "Yes", answer questions a - f. If "No", move on to Section 7.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. If the proposed action requires federal or state air emission permits, the action may also emit one or more greenhouse gases at or above the following levels: i. More than 1000 tons/year of carbon dioxide (CO <sub>2</sub> ) ii. More than 3.5 tons/year of nitrous oxide (N <sub>2</sub> O) iii. More than 1000 tons/year of carbon equivalent of perfluorocarbons (PFCs) iv. More than .045 tons/year of sulfur hexafluoride (SF <sub>6</sub> ) v. More than 1000 tons/year of carbon dioxide equivalent of hydrochloroflourocarbons (HFCs) emissions vi. 43 tons/year or more of methane	D2g D2g D2g D2g D2g D2h	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
b. The proposed action may generate 10 tons/year or more of any one designated hazardous air pollutant, or 25 tons/year or more of any combination of such hazardous air pollutants.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may require a state air registration, or may produce an emissions rate of total contaminants that may exceed 5 lbs. per hour, or may include a heat source capable of producing more than 10 million BTU's per hour.	D2f, D2g	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may reach 50% of any of the thresholds in "a" through "c", above.	D2g	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in the combustion or thermal treatment of more than 1 ton of refuse per hour.	D2s	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

<b>7. Impact on Plants and Animals</b>			
The proposed action may result in a loss of flora or fauna. (See Part 1. E.2. m.-q.) <i>If "Yes", answer questions a - j. If "No", move on to Section 8. (See Full-EAF Project Narrative, Part 2, Item 7)</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may cause reduction in population or loss of individuals of any threatened or endangered species, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2o	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
b. The proposed action may result in a reduction or degradation of any habitat used by any rare, threatened or endangered species, as listed by New York State or the federal government.	E2o	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action may cause reduction in population, or loss of individuals, of any species of special concern or conservation need, as listed by New York State or the Federal government, that use the site, or are found on, over, or near the site.	E2p	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in a reduction or degradation of any habitat used by any species of special concern and conservation need, as listed by New York State or the Federal government.	E2p	<input type="checkbox"/>	<input type="checkbox"/>



e. The proposed action may diminish the capacity of a registered National Natural Landmark to support the biological community it was established to protect.	E3c	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
f. The proposed action may result in the removal of, or ground disturbance in, any portion of a designated significant natural community. Source: _____	E2n	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
g. The proposed action may substantially interfere with nesting/breeding, foraging, or over-wintering habitat for the predominant species that occupy or use the project site.	E2m	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action requires the conversion of more than 10 acres of forest, grassland or any other regionally or locally important habitat. Habitat type & information source: _____	E1b	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
i. Proposed action (commercial, industrial or recreational projects, only) involves use of herbicides or pesticides.	D2q	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
j. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

<b>8. Impact on Agricultural Resources</b>			
The proposed action may impact agricultural resources. (See Part 1. E.3.a. and b.) <i>If "Yes", answer questions a - h. If "No", move on to Section 9.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
		(NOT APPLICABLE)	
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may impact soil classified within soil group 1 through 4 of the NYS Land Classification System.	E2c, E3b	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may sever, cross or otherwise limit access to agricultural land (includes cropland, hayfields, pasture, vineyard, orchard, etc).	E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may result in the excavation or compaction of the soil profile of active agricultural land.	E3b	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may irreversibly convert agricultural land to non-agricultural uses, either more than 2.5 acres if located in an Agricultural District, or more than 10 acres if not within an Agricultural District.	E1b, E3a	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may disrupt or prevent installation of an agricultural land management system.	E1 a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action may result, directly or indirectly, in increased development potential or pressure on farmland.	C2c, C3, D2c, D2d	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed project is not consistent with the adopted municipal Farmland Protection Plan.	C2c	<input type="checkbox"/>	<input type="checkbox"/>
h. Other impacts: _____		<input type="checkbox"/>	<input type="checkbox"/>

<b>9. Impact on Aesthetic Resources</b> The land use of the proposed action are obviously different from, or are in sharp contrast to, current land use patterns between the proposed project and a scenic or aesthetic resource. (Part 1. E.1.a, E.1.b, E.3.h.) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - g. If "No", go to Section 10.</i> (See Full-EAF Project Narrative, Part 2, Item 9)			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. Proposed action may be visible from any officially designated federal, state, or local scenic or aesthetic resource. The Old Croton Aqueduct Trail north of the project site.	E3h	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the obstruction, elimination or significant screening of one or more officially designated scenic views.	E3h, C2b	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action may be visible from publicly accessible vantage points: i. Seasonally (e.g., screened by summer foliage, but visible during other seasons) ii. Year round	E3h	(NOT APPLICABLE) <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
d. The situation or activity in which viewers are engaged while viewing the proposed action is: i. Routine travel by residents, including travel to and from work ii. Recreational or tourism based activities	E3h E2q, E1c	(NOT APPLICABLE) <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
e. The proposed action may cause a diminishment of the public enjoyment and appreciation of the designated aesthetic resource.	E3h	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
f. There are similar projects visible within the following distance of the proposed project: 0-1/2 mile 1/2 -3 mile 3-5 mile 5+ mile	D1a, E1a, D1f, D1g	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

<b>10. Impact on Historic and Archeological Resources</b> The proposed action may occur in or adjacent to a historic or archaeological resource. (Part 1. E.3.e, f. and g.) <input type="checkbox"/> NO <input type="checkbox"/> YES <i>If "Yes", answer questions a - e. If "No", go to Section 11.</i> (See Full-EAF Project Narrative, Part 2, Item 10)			
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may occur wholly or partially within, or substantially contiguous to, any buildings, archaeological site or district which is listed on the National or State Register of Historical Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places.	E3e	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may occur wholly or partially within, or substantially contiguous to, an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory.	E3f	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may occur wholly or partially within, or substantially contiguous to, an archaeological site not included on the NY SHPO inventory. Source: _____	E3g	<input type="checkbox"/>	<input type="checkbox"/>

d. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>
e. If any of the above (a-d) are answered “Moderate to large impact may occur”, continue with the following questions to help support conclusions in Part 3:			
i. The proposed action may result in the destruction or alteration of all or part of the site or property.	E3e, E3g, E3f	<input type="checkbox"/>	<input type="checkbox"/>
ii. The proposed action may result in the alteration of the property’s setting or integrity.	E3e, E3f, E3g, E1a, E1b	<input type="checkbox"/>	<input type="checkbox"/>
iii. The proposed action may result in the introduction of visual elements which are out of character with the site or property, or may alter its setting.	E3e, E3f, E3g, E3h, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>

<b>11. Impact on Open Space and Recreation</b>			
The proposed action may result in a loss of recreational opportunities or a reduction of an open space resource as designated in any adopted municipal open space plan. (See Part 1. C.2.c, E.1.c., E.2.q.) <i>If “Yes”, answer questions a - e. If “No”, go to Section 12.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
		(See Full-EAF Project Narrative, Part 2, Item 11)	
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may result in an impairment of natural functions, or “ecosystem services”, provided by an undeveloped area, including but not limited to stormwater storage, nutrient cycling, wildlife habitat.	D2e, E1b E2h, E2m, E2o, E2n, E2p	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
b. The proposed action may result in the loss of a current or future recreational resource.	C2a, E1c, C2c, E2q	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action may eliminate open space or recreational resource in an area with few such resources.	C2a, C2c E1c, E2q	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may result in loss of an area now used informally by the community as an open space resource.	C2c, E1c	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
e. Other impacts: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

<b>12. Impact on Critical Environmental Areas</b>			
The proposed action may be located within or adjacent to a critical environmental area (CEA). (See Part 1. E.3.d) <i>If “Yes”, answer questions a - c. If “No”, go to Section 13.</i>		<input type="checkbox"/> NO	<input type="checkbox"/> YES
	<b>Relevant Part I Question(s)</b>	<b>No, or small impact may occur</b>	<b>Moderate to large impact may occur</b>
a. The proposed action may result in a reduction in the quantity of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in a reduction in the quality of the resource or characteristic which was the basis for designation of the CEA.	E3d	<input type="checkbox"/>	<input type="checkbox"/>
c. Other impacts: _____ _____		<input type="checkbox"/>	<input type="checkbox"/>

**13. Impact on Transportation**  
 The proposed action may result in a change to existing transportation systems.  NO  YES  
 (See Part 1. D.2.j) (See Full-EAF Narrative, Part 2, Item 13)  
*If "Yes", answer questions a - f. If "No", go to Section 14.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. Projected traffic increase may exceed capacity of existing road network.	D2j	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in the construction of paved parking area for 500 or more vehicles.	D2j	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action will degrade existing transit access.	D2j	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
d. The proposed action will degrade existing pedestrian or bicycle accommodations.	D2j	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
e. The proposed action may alter the present pattern of movement of people or goods.	D2j	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

**14. Impact on Energy**  
 The proposed action may cause an increase in the use of any form of energy.  NO  YES  
 (See Part 1. D.2.k) (See Full-EAF Project Narrative, Part 2, Item 14)  
*If "Yes", answer questions a - e. If "No", go to Section 15.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action will require a new, or an upgrade to an existing, substation.	D2k	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
b. The proposed action will require the creation or extension of an energy transmission or supply system to serve more than 50 single or two-family residences or to serve a commercial or industrial use.	D1f, D1q, D2k	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action may utilize more than 2,500 MWhrs per year of electricity.	D2k	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action may involve heating and/or cooling of more than 100,000 square feet of building area when completed.	D1g	<input type="checkbox"/>	<input type="checkbox"/>
e. Other Impacts: _____ _____			(NOT APPLICABLE)

**15. Impact on Noise, Odor, and Light**  
 The proposed action may result in an increase in noise, odors, or outdoor lighting.  NO  YES  
 (See Part 1. D.2.m., n., and o.) (See Full-EAF Project Narrative, Part 2, Item 15)  
*If "Yes", answer questions a - f. If "No", go to Section 16.*

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may produce sound above noise levels established by local regulation.	D2m	<input type="checkbox"/>	<input type="checkbox"/>
b. The proposed action may result in blasting within 1,500 feet of any residence, hospital, school, licensed day care center, or nursing home.	D2m, E1d	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action may result in routine odors for more than one hour per day.	D2o	<input type="checkbox"/>	<input type="checkbox"/>

(NOT APPLICABLE)

d. The proposed action may result in light shining onto adjoining properties.	D2n	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may result in lighting creating sky-glow brighter than existing area conditions.	D2n, E1a	<input type="checkbox"/>	<input type="checkbox"/>
f. Other impacts: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

### 16. Impact on Human Health

The proposed action may have an impact on human health from exposure to new or existing sources of contaminants. (See Part 1.D.2.q., E.1. d. f. g. and h.)  NO  YES  
 If "Yes", answer questions a - m. If "No", go to Section 17. (NOT APPLICABLE)

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action is located within 1500 feet of a school, hospital, licensed day care center, group home, nursing home or retirement community.	E1d	<input type="checkbox"/>	<input type="checkbox"/>
b. The site of the proposed action is currently undergoing remediation.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
c. There is a completed emergency spill remediation, or a completed environmental site remediation on, or adjacent to, the site of the proposed action.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
d. The site of the action is subject to an institutional control limiting the use of the property (e.g., easement or deed restriction).	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
e. The proposed action may affect institutional control measures that were put in place to ensure that the site remains protective of the environment and human health.	E1g, E1h	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action has adequate control measures in place to ensure that future generation, treatment and/or disposal of hazardous wastes will be protective of the environment and human health.	D2t	<input type="checkbox"/>	<input type="checkbox"/>
g. The proposed action involves construction or modification of a solid waste management facility.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
h. The proposed action may result in the unearthing of solid or hazardous waste.	D2q, E1f	<input type="checkbox"/>	<input type="checkbox"/>
i. The proposed action may result in an increase in the rate of disposal, or processing, of solid waste.	D2r, D2s	<input type="checkbox"/>	<input type="checkbox"/>
j. The proposed action may result in excavation or other disturbance within 2000 feet of a site used for the disposal of solid or hazardous waste.	E1f, E1g E1h	<input type="checkbox"/>	<input type="checkbox"/>
k. The proposed action may result in the migration of explosive gases from a landfill site to adjacent off site structures.	E1f, E1g	<input type="checkbox"/>	<input type="checkbox"/>
l. The proposed action may result in the release of contaminated leachate from the project site.	D2s, E1f, D2r	<input type="checkbox"/>	<input type="checkbox"/>
m. Other impacts: _____ _____			

**17. Consistency with Community Plans**

The proposed action is not consistent with adopted land use plans.

 NO YES

(See Part 1. C.1, C.2. and C.3.)

(See Full-EAF Project Narrative, Part 2, Item 17)

If "Yes", answer questions a - h. If "No", go to Section 18.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action's land use components may be different from, or in sharp contrast to, current surrounding land use pattern(s).	C2, C3, D1a E1a, E1b	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
b. The proposed action will cause the permanent population of the city, town or village in which the project is located to grow by more than 5%.	C2	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
c. The proposed action is inconsistent with local land use plans or zoning regulations.	C2, C2, C3	<input type="checkbox"/>	<input type="checkbox"/>
d. The proposed action is inconsistent with any County plans, or other regional land use plans.	C2, C2	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
e. The proposed action may cause a change in the density of development that is not supported by existing infrastructure or is distant from existing infrastructure.	C3, D1c, D1d, D1f, D1d, E1b	<input type="checkbox"/>	<input type="checkbox"/>
f. The proposed action is located in an area characterized by low density development that will require new or expanded public infrastructure.	C4, D2c, D2d D2j	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
g. The proposed action may induce secondary development impacts (e.g., residential or commercial development not included in the proposed action)	C2a	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
h. Other: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>

**18. Consistency with Community Character**

The proposed project is inconsistent with the existing community character.

 NO YES

(See Part 1. C.2, C.3, D.2, E.3)

(See Full-EAF Project Narrative, Part 2, Item 18)

If "Yes", answer questions a - g. If "No", proceed to Part 3.

	Relevant Part I Question(s)	No, or small impact may occur	Moderate to large impact may occur
a. The proposed action may replace or eliminate existing facilities, structures, or areas of historic importance to the community.	E3e, E3f, E3g	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
b. The proposed action may create a demand for additional community services (e.g. schools, police and fire)	C4	<input type="checkbox"/>	<input type="checkbox"/>
c. The proposed action may displace affordable or low-income housing in an area where there is a shortage of such housing.	C2, C3, D1f D1g, E1a	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
d. The proposed action may interfere with the use or enjoyment of officially recognized or designated public resources.	C2, E3	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
e. The proposed action is inconsistent with the predominant architectural scale and character.	C2, C3	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
f. Proposed action is inconsistent with the character of the existing natural landscape.	C2, C3 E1a, E1b E2g, E2h	<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>
g. Other impacts: _____ _____		<input type="checkbox"/> (NOT APPLICABLE)	<input type="checkbox"/>



**PROJECT NARRATIVE FOR THE FULL-EAF**  
**FIELD HOME ACTIVE ADULT COMMUNITY**  
**DEVELOPMENT**

**PROJECT NARRATIVE**  
**FULL-ENVIRONMENTAL ASSESSMENT FORM**  
**FIELD HOME ACTIVE ADULT COMMUNITY**  
**(November 2022; Revised August 2023 & February 2024)**

**PART 1 - PROJECT AND SETTING**

Item A - Project and Applicant/Sponsor Information (continued):

The Applicant is contract-vendee to purchase two parcels totaling 50.51 acres, currently split zoned in the RSP-3 and R1-40 Districts. The parcels were the subject of a prior site plan review process, culminating in the Planning Board approving the development of a 145-unit independent living community. The Applicant is proposing to rezone the two parcels into the RSP-2 District. Upon the rezoning, the Applicant is proposing to re-subdivide the parcels into two new parcels: (i) the 118-unit residential development would be constructed on approximately 48.06 acres; and (ii) a 2.45-acre parcel on which the existing Field Home Building would remain. State-of-the-art storm water management practices and controls, including two storm water bio-infiltration basins, are incorporated in the design of the project to retain, treat, and infiltrate storm water generated on-site by the development. The Field Home would be considered for reuse by the Town of Yorktown or a lessee.

The proposed development will demand 38,940 gallons of water supply which is proposed to be obtained from the Yorktown Consolidated Water District. Sanitary wastewater generated by the development (approximately 38,940 gallons/day) will be piped to the Town of Yorktown Sewer Department. It should be noted that the projected sewer and water demands are not net of existing demands generated by the existing use on site. Sanitary wastewater pipe connections will be extended to existing on-site sewer lines, which currently route wastewater generated by the Field Home Foundation and the Yorktown Rehabilitation and Nursing Center to the Yorktown Sewer Department Treatment Plant.

The topography of the project site ranges from 0 to greater than 25 percent slopes, portions of which will be developed on slopes greater than 15 percent. An unnamed stream, including adjoining freshwater wetlands, lie along the eastern portions of property site. The stream flows both north and south and is a sub-tributary of the Hunter Brook (a NYSDEC Class B stream with a B(TS) standard), situated 0.70 miles south of the site. Most of the property is comprised of a hardwood deciduous forest including forested wetland areas. An existing soccer field lies within the southeast portion of the site which is currently used by area youth groups and soccer clubs for practice. A subsurface sanitary wastewater leach field exists below the soccer field which will be removed as part of planned development of the site. The abandonment of the sanitary wastewater system will be performed in accordance with the “Guidelines for Abandoning Subsurface Sewage Treatment Systems (SSTS)” published by Westchester County. A plan sheet entitled “Existing Conditions” is provided as Attachment B which depicts site conditions.

Item D.2. – Project Operations (d.) (iii):

As noted, the project will require connection with existing on-site sewer mains located in proximity to the proposed project. During the Spring of 2022, the Applicant retained the services of ADS Environmental Services of Huntsville, Alabama to conduct a preliminary flow monitoring

evaluation of the existing amount of system inflow and infiltration at four (4) locations. The area of focus was near the Holy House of Comfort in proximity to the proposed development. Flows were measured during wet and dry weather to assist Toll Brothers in determining the magnitude of rainfall derived infiltration and inflow (RDII). A report entitled “Yorktown NY TB” is provided under Attachment C to further explain the technology and analyses completed for monitoring observed flow conditions. The four locations monitored are depicted on a plan sheet entitled “Sewer Monitoring Plan,” also contained under Attachment C.

Based on a preliminary flow monitoring evaluation completed by on behalf of the Applicant, the existing amount of inflow and infiltration is not considered to be significant. Overall, the sewer system was determined to be in good repair with no notable defects. Further, the existing 8-inch PVC piping network showed sufficient available capacity with minimal extraneous flows from seasonal rainfall.

Based on the preliminary flow monitoring activities and analyses completed by ADS Environmental Services, the amount of existing inflow and infiltration within existing area sewer mains present suitable opportunity to facilitate sewer line connections with the proposed project.

Correspondence received from the Town of Yorktown Town Engineer (dated April 20, 2022) indicates that wastewater sanitary sewage generated by Field Home project can convey wastewater to the Hunterbrook Pump Station (HBPS) by way of existing gravity sewers. In addition, the sewer collection system that will connect the project to the HBPS appears to have adequate capacity, and the Peekskill Treatment Plant will likely have adequate treatment capacity for the volumes of wastewater generated by the project. It is important to note that the HBPS has capacity issues during storm events due to inflow and infiltration (I&I). As such, acceptance of wastewater generated by the project will be based on project sewer flows and the effectiveness of I&I remediation. A copy of the Town Engineer’s letter is also contained in Attachment C. The Town Engineer is currently assessing receiving facilities located off-site, downstream of the project site.

Item E.2.– Depth to Bedrock (a.):

The average depth to a bedrock is 6.0 to 10.0 feet. This average was confirmed by Collin-Simpson & Associates of Sayreville, New Jersey who was retained by the Applicant to complete a geotechnical investigation (by way of test pit excavations) of the proposed development site.

Based on a test pit investigation performed by Site Design Consultants to confirm soil conditions with the New York City Department of Environmental Protection, soils throughout the majority of the proposed project limits are comprised of sandy loam soils. Maximum depths reached within the test pits ranged from 55 to 96-inches below the surface. Soil conditions encountered confirmed the types of soil textures reported by the National Resource Conservation Service (NRCS; web-soil survey) for the site and at no time were any bedrock restrictive layers encountered. In light of this information, the Applicant does not expect to encounter bedrock, and thus, rock blasting will not be necessary.

**PART 2 – IDENTIFICATION OF POTENTIAL PROJECT IMPACTS**

Item 1-Impact on Land (b)(d)(e)(f):

Of the 50.51 area project site, 28.64 acres will be disturbed and developed for the Field Home project. As noted, portions of the site have slopes greater than 15 percent, portions of which will be developed under the project.

More than 1,000 tons of natural material will be excavated, moved around the site, or removed to off-site locations for use at other project sites controlled by the Applicant. These activities will result in the disturbance of existing vegetation, thereby resulting in increased erosion potential for the site. Treatment by herbicides will not be performed for the project. While the project will consist of a single phase, its overall construction period will be more than 1-year.

A summary of an Earthwork Analysis was completed for the project by Toll Brothers and is tabulated below.

DESIGN REGION	AREA (SF)	6" STRIP (CY)	6" REPLATE (CY)	EXCESS TOPSOIL (CY)	CUT (CY)	FILL (CY)	CUT – FILL (CY)
<b>Phase 1</b>							
Site	1,260,667	(20,676)	19,871	805	(190,326)	178,506	11,820
SW Basins	160,072	(5,929)	5,666	263	(7,188)	18,418	(11,230)
<b>Phase 1</b>	<b>1,420,739</b>	<b>(26,605)</b>	<b>25,537</b>	<b>1,068</b>	<b>(217,514)</b>	<b>176,924</b>	<b>590</b>

Based on the above tabulation, the estimated total area of project disturbance will be 1,420,739 square feet. The project will be designed to have a balanced amount of cut and fill which will result in generating little excess soil material. Overall, the project will result in a slight excess of 1,068 cubic yards of topsoil which will be used on-site; no material will be exported from the site. The goal is to balance all materials on the site.

Given the above quantities and the need to conduct development activities in a staged sequence necessary to avoid potential project impacts related to land disturbance, the construction duration will extend beyond a year’s time.

Construction on slopes greater than 15 percent will be minimized as much as practically possible in order to avoid impacts and reduce project costs. Various practices will be considered when working on slopes including use of erosion control blankets, terracing, drainage diversion and staged plantings and seeding to establish grassed stabilization. Prior to construction, the Town Engineer will review a Slope Plan, as well as physically inspect areas of the site planned for construction on slopes. This will serve to minimize such construction and implement necessary practices for slope protection and stabilization. These practices have been included in a project specific Stormwater Pollution Prevention Plan (SWPPP) which has been prepared to avoid impacts related to erosion and sedimentation potentials for the project during and after construction. These matters are further discussed below.

Item 3-Impacts on Surface Water (d)(e)(h)(h)(i)(j):

As noted, portions of the northeastern storm water basin and a southwest section of the southern access driveway/road (including fill placement) will encroach within a Town freshwater wetland adjacent area (100-foot buffer) totaling 1.84 acres of encroachment and the alteration of 0.07-acre areas within Town/US Army Corps of Engineers regulated wetlands. The 1.84 acres of buffer encroachment and 0.07-acre alteration will be mitigated on-site partially as enhancement of an existing waterway and creation of wetlands. As set forth in the Wetland Functional Analysis prepared by Ecological Analysis, LLC, dated February 5, 2024, the primary benefits and function of these wetlands are ground water recharge and flood attenuation. Nonetheless, the 1.84 acres of buffer encroachment and 0.07-acre alteration will be mitigated on-site partially as enhancement of an existing waterway and creation of wetlands. Therefore, the proposed buffer encroachment and minimal (.07-acre) wetland disturbance is not anticipated to significantly impact the function and benefit of the wetlands on site. The Applicant will file an application for a Town Wetlands Permit including a mitigation plan for Town Planning Board review. In addition, the Applicant will obtain a General Nationwide Permit for the alteration of 0.07-acres of wetlands.

The proposed development has the potential to create turbidity in on-site and off-site downgradient waterways, as well as result in erosion, sedimentation (including siltation) within streams and on-site wetlands, and water quality impact potentials for on-site or off-site, downgradient streams. These impacts will be mitigated by implementation of a Storm Water Management Plan, including an Erosion and Sediment Control Plan, which will be included as part of the project specific SWPPP. A detailed construction sequence will be contained in the SWPPP to guide the sequence of construction activities which will focus on implementation of several components aimed at avoiding and continuously avoiding erosion, sedimentation, and water quality impact potentials for the project. A plan sheet entitled “Stormwater Management Plan” is provided as Attachment D, which depicts the location of two sedimentation (bio-infiltration) basins, as well as green infrastructure practices with provisions for rainwater harvesting.

All the above noted Plans, and especially the SWPPP, will address potential impacts during and after construction including use of both temporary and permanent state-of-the-art controls (including two sedimentation basins) and practices necessary to avoid such impact potentials. The Plans will be reviewed by the Town Planning Board as part of the Site Plan Approval process, as well as by the New York City Department of Environmental Protection (NYCDEP) as the project lies within the NYCDEP Watershed Boundary Area. In addition, the Westchester County Department of Planning will review and comment on the Plans as part of their SEQR Review process. Eventually, the Town of Yorktown Engineer will sign-off on the SWPPP for implementation prior to commencing any construction activities. Further, the NYSDEC will review a Notice-of-Intent for coverage under the Construction General Permit (CGP) and grant acknowledgement of coverage under the General Permit (GP-0-20-001). Given the above, potential impacts to surface waters will be mitigated on-site.

After construction completion, application of pesticide, herbicides, and other chemicals as part of lawn care and landscaping will be applied by a qualified and permitted firm experienced

with New York State Integrated Pest Control Management practices. These practices will serve to avoid potential impacts to people, property, and the environment.

Item 4 – Impact on Groundwater (b.):

As noted, the proposed development will demand 38,940 gallons of water per day (gpd). Water supply source distribution lines are available in proximity to the proposed project site. The Yorktown Consolidated Water District will be the water supply for the proposed project, which obtains supplies from the Amawalk Reservoir and the Catskill Aqueduct. These sources have and continue to provide Yorktown with a reliable volume of potable water supplies for existing and future residents. The Yorktown Consolidated Water District is part of the Northern Westchester Joint Water Works (NWJWW) which is a collaboration between the Town of Yorktown, Somers, Cortlandt and the Montrose Improvement District. The NWJWW utilizes two conventional surface water treatment plants to produce 7.46 (seasonal range of 3.4 to 11.7 MPG) Million Gallons per Day of water supply. With a combined maximum of 15.0 MGD, the NWJWW has sufficient capacity for future growth.

Based on correspondence received On May 5, 2022, from the Yorktown Consolidated Water District-Assistant Distribution Superintendent, the Yorktown Consolidated Water District can certify that there is adequate pressure and supply to service the proposed Field Home project. The Applicant will be responsible to make appropriate connections to supply water into the development. A copy of the correspondence is contained in Attachment E.

Item 7-Impacts on Plants and Animals:

Plants and Animals

Based on a review of the NYSDEC Hudson Valley Natural Resource Mapper, known important areas of rare terrestrial animals have been mapped across a small portion of the proposed development site. Considering this indication, the Applicant has contacted the NY Natural Heritage Program (NYNHP) with a request for the Program to provide a detailed review of their files for the project site. On December 8, 2022, a letter of determination was received from the NYNHP which indicates that the Program has no record of rare or state-listed animals and plants, or significant natural communities at the project site, or in its immediate vicinity (Attachment H).

In addition to the NYNHP file search, a search of the site and adjoining areas was performed using the New York State Department of Environmental Conservation (NYSDEC) Hudson Valley Natural Resource Mapper. Based on the resource mapper, a portion of the southeast area of the site is mapped as an area of known important rare terrestrial animals. Further, the site and vicinity are not mapped as Bat foraging area and no Hudson Valley Core Forests or Forest Linkage Zones exist for the site. Forest Core and Linage areas are regarded as important habitat areas that sustain and allow sensitive wildlife to exist and move or disperse across the landscape.

In addition to reviewing state resource mappers, Ecological Analysis, LLC prepared a Wildlife Habitat Assessment of the project site. Ecological Analysis confirmed that the site does not contain protected wildlife species or habitat. In addition, Ecological Analysis concluded that the proposed development would not result in any significant adverse impacts to area-wide plant

and animal habitat, particularly since a large portion of the site will remain as wooded area and/or wetland.

While no Bat foraging areas are mapped for the site and vicinity, the Applicant has consulted with the NYSDEC to confirm whether there is a need to implement tree cutting restrictions during certain periods of the year. By email, dated February 1, 2024, the NYSDEC confirmed that a time of year restriction on tree removal is not necessary. A copy of this letter is provided herewith.

### Tree Inventory

A tree inventory and summary data report were completed for the proposed development site by Bartlett Tree Experts of Elmsford, New York. Appendix F contains a document entitled “2300 Catherine Street, Tree Inventory Data, 2023”, (dated August 25, 2023) which presents a breakdown of 2,268 trees determined to be in good, fair, moderate and poor condition for the site. A total of 1,804 trees are regarded as being in good and fair condition; 464 trees were determined to be of poor condition, or dead. This data and other tabulated statistics are included in the data summary report to aid in the development of mitigation measures to minimize and avoid unnecessary tree impacts. Based on the results of the tree inventory, the Applicant will work with Bartlett Tree Experts and Site Design Engineering to evaluate for implementation Best Management Practices to avoid, and minimize impacts to on-site trees, specifically trees of good and fair condition situated in the limits of the proposed development. In addition, a Tree Mitigation Plan will be developed as part of obtaining a Town Tree Permit for the removal of regulated trees.

### Item 9-Impact on Aesthetic Resources

Town Staff has questioned whether portions of the Field Home residential development will be visible from the Old Croton Aqueduct Trail located approximately 100 to 200 feet north of the proposed project limits, and from the Sylvan Glen Nature Preserve, which is located downhill and across Route 202 from the project site.

The applicant has drafted sectional analysis related to the Old Croton Aqueduct Trail, and spatial analysis related to the Sylvan Glenn Nature Preserve to investigate potential viewshed impacts. Based upon the analysis, the applicant concludes that visual impacts will be de minimis due to the nature of existing vegetation to remain and the proposed grade relationships between the project site and the aesthetic resources in question. However, in an effort to further reduce the potential for aesthetic impacts to users of the Trail, the Applicant plans to provide vegetation screening along the northern boundaries of the site to supplement the existing buffer to remain. The vegetation will consist of native trees and shrubs of various heights and diameters to screen views of the development as one traverses on the trail to offset potential visual impacts for Trail visitors. A vegetative screen will be incorporated into a Landscape Plan which will be provided to the Town for review and approval.

### Item 10-Impact on Historical and Archeological Resources

#### State Historic Preservation Office

The State Historic Preservation Office (SHPO) was contacted on October 25, 2022 with a request to conduct a review of their files pertaining to the presence of historical and/or

archeological resources for the site and surrounding area. On October 28, 2022, SHPO provided correspondence indicating that based on their review, it is the opinion of the Office of Parks, Recreation and Historic Preservation (OPRHP) that no properties, including archeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by the project. A copy of State's correspondence is contained as Attachment G.

### Field Home

The on-site Field Home was constructed during the late eighteenth and early nineteenth centuries by Cortlandt dePeyster Field, a prominent businessman and philanthropist, to serve as a home for the poor. Initially, the home was used for summer retreats by episcopal missionaries and priests before becoming a home. The building has been in use as a residential home up to of 1998, when it since has been used as offices for the Field Home Foundation.

During July 2023, Toll Bros. Inc. retain the services of Stephen Tilly, Architect (STA), of Dobbs Ferry, New York, to conduct an investigation of the exterior and interior of the Home and provide a historic analysis (including historic conditions) and an adaptive reuse plan for the Town Planning Board's review and recommendation to the Town Board. A report entitled, "Field Home, Yorktown New York-Reports: Historic Analysis, Conditions & Adaptive Reuse" has been prepped by STA and has been submitted with the Full-EAF under separate cover for review by the Town Planning Board.

The report notes that while portions of the Field Home displays signs of wear and deterioration, all portions of the building are solidly constructed of reinforced concrete with wood and steel structure. The original exterior and interior date back to its earliest construction, representing a timeless historical resource determined to be worthy of reuse.

The report further notes that the Town of Yorktown is interested in obtaining or occupying the Field Home, or perhaps leasing the space to private businesses; there are several potential reuse concepts that the Town could explore. Adaptive use options outlined for the Field Home include:

- 1) "Work/Live Here" Incubator Work/Live Option – reuse of the entire building to provide duplex units and apartments for startups, artists and light industrial establishments. This option would require the greatest amount of historic renovation including structural treatments, reinforcements and potentially addressing vulnerable joints/planes identified where various structural systems and roofs connect;
- 2) "Make Here" Mixed Light Industrial/Studio Option – this option focuses on prioritizing incubator and independent workplaces including light industrial workshops and perhaps a child-care facility. The existing floor layouts and access doors throughout serve to facilitate this option;
- 3) "Work Here" Office Option – This option prioritizes offices and independent work spaces, whereby a variety of sizing in space can serve different occupants. This will involve a considerable amount of building demolition including deeper basement areas, resulting in limited structural repairs overall compared to options 1 and 2. The removal of existing building space by demolition will provide area parking space behind the remaining building and retains the front lawn and small sport courts.



The above options represent suitable adaptive reuse of the Field Home, which will attract public and private entities to continue a tradition of supporting residential growth and culture within the local community.

#### Item 11- Impact on Open Space and Recreation

The proposed development will require the demolition of an existing on-site 7 v. 7 practice field located near the west boundary of the project site, which is accessed from Catherine Street. The town currently leases this field from The Field Home. The lease will expire in January of 2026. The loss of this field (whether through the expiration of the lease or the proposed redevelopment) will result in an impact on existing recreational demands for the field which have been experienced by members of the community for several years. Based on characteristics and demands for the on-site Field Home field, the Applicant, in collaboration with the Yorktown Recreation Department, has proposed use of the upper field at the Hunterbrook Recreation Area as mitigation for the loss of the Filed Home field. The Hunterbrook upper field is of similar size with ideal parking and is located in suitable proximity to service existing recreational demands within the vicinity of the existing field. Representatives of the Town Recreation Department have indicated that the upper field, with improvements, can accommodate the loss of the existing Field Home field.

The Applicant has voluntarily offered \$150,000 for improvements to the Hunterbrook upper field to facilitate the Town Recreation Department's improvement project. In addition, improvements to the upper field at the Hunterbrook Recreation Area would be derived from the additional \$1,017,702 of annual net surplus tax revenue generated by the project. Overall, the recreation fees and surplus revenue generated by the project, and the Applicant's voluntary contribution will provide ideal mitigation for the loss of the Field Home field with surplus revenues to service other recreational needs within the Town of Yorktown.

In addition, the Applicant is providing various on-site recreational amenities to accommodate the 55+ demographic that will be living in the development. This includes a clubhouse with pool and pickle-ball courts. To the extent that these on-site amenities would not wholly accommodate the residents' demand for recreational space, the Applicant will pay another \$472,000 in recreational fees to the Town.

Accordingly, the total contribution of \$622,000 towards the Town's recreation budget, plus a portion of the \$1,017,702 annual tax revenue attributable to the redevelopment, should ensure that any potential impacts to the Town's open space and recreational resource inventory are not significant.

In an effort to mitigate the reduction of existing open space within the limits of the proposed development, the Applicant is offering an approximate 14.3-acre Conservation Easement within the eastern portions of the site. The easement area will encompass the most naturally diverse areas of the site which include wetlands and adjoining buffer habitat areas. The conservation easement area near the eastern boundary of the site is depicted on the Site Plan Set, prepared by Site Design Consultants, last revised February 20, 2024.

### Item 13 - Impact on Transportation:

To evaluate potential traffic impacts generated by the proposed development, the Applicant retained the services of Collier Engineering & Design of Valhalla, New York to complete a Traffic Impact Study for 120 units. Since the completion of the Study, Toll Brothers decided to revise the plan to minimize environmental impacts associated with the development which led to a reduction of density by 2 units. The document entitled “Traffic Impact Study-Proposed Active Adult Residential Development, 2300 Catherine Street, Town of Yorktown, Westchester County, New York”, has been provided under separate cover with this Full-EAF.

The Study utilized a design year of 2026 for completing traffic generation analysis in order to determine future traffic conditions, in addition to determining current traffic operating conditions (Year 2022 Existing Traffic Volumes). A 2% annual growth factor was applied to Year 2022 Existing Traffic Volumes to obtain and compare to 2026 Design Year in order to determine area background traffic growth. In addition, traffic generation for other specific potential or approved development in the area was estimated and were considered in development Year 2026 No-Build Traffic Volumes. Estimates of project related traffic potentials were then developed for peak hour volumes; the resulting site generation traffic volumes were then added to the roadway system and combined with the Year 2026 No-Build Traffic Volumes thereby resulting in the year 2026 Build Traffic Volumes. Existing, No-Build and Build Traffic Volumes were then compared to capacities in accordance with the Highway Capacity Manual to determine existing and future Levels-of-Service and operating conditions. Subsequently, recommendations for traffic related improvements were provided to minimize potential impacts of existing and future traffic volumes.

The roadways considered under the Study included internal development access roads, NYS Route 35/US Route 202 (Crompond Road), Catherine Street, Jacob Road, Old Crompond Road and Garden Lane. Manual traffic counts were obtained during May 2022 for AM and PM Peak Hour periods at study intersections. Based on traffic counts, Weekday Peak AM Hour was 7:30 to 8:30 AM and Weekday Peak PM Hour was 5:00 to 6:00 PM. Estimates of the amount of traffic generated by the proposed development during Peak Hours were also developed. It was also necessary to establish arrival and departure traffic distributions to assign site generated traffic to the surrounding roadway network as well as complete a capacity analysis to determine existing and future traffic conditions for study area intersections, for both signalized and un-signalized intersections. Capacity analyses of truck percentages, pedestrian activity, roadway grades and other factors were completed to determine Level-of-Service and average vehicle delays.

### RESULTS OF ANALYSIS

The following presents a summary of existing and future Level-of-Service for the intersections evaluated, as well as some recommended improvements:

- 1) US Route 202 (Crompond Road) and Garden Lane: capacity analysis indicates that the existing left-turn from Garden Lane is currently operating at a Level-of-Service “D” and “E” during AM and PM Peak Hours, respectively. Using 2026 Build and No-Build Traffic Volumes, the left turn is expedited to operate at Levels-of-Service “D/E and F” during AM and PM Peak Hours, respectively. A traffic signal would be required to improve these conditions; however, the NYSDOT traffic signal warrants are not satisfied for this location;

- 2) Catherine Street and Depeyster Drive: capacity analysis indicates that this intersection is operating at an overall Level-of-Service “A” during AM and PM Peak Hours. This intersection is expected to operate at Level-of-Service “B” or better during the AM and PM Peak Hours under future conditions;
- 3) Catherine Street and Jacob Road: capacity analysis indicates that current conditions are operating at a Level-of-Service “A” during AM and PM Peak Hours. Analysis indicates that this intersection would operate at a Level-of-Service “B” or better during future AM and PM Peak Hours;
- 4) Catherine Street and Old Crompond Road: capacity analysis indicates that current conditions are operating at a Level-of-Service “B” or better during AM and PM Peak Hours. Analysis indicates that this intersection would operate at a Level-of-Service “B” or better during future AM and PM Peak Hours;
- 5) Garden Lane and Old Crompond Road: capacity analysis indicates that current conditions are operating at a Level-of-Service “B” or better during AM and PM Peak Hours. Analysis indicates that this intersection would operate at a Level-of-Service “B” or better during future AM and PM Peak Hours;
- 6) Catherine Street and Existing Site Access: capacity analysis indicates that current conditions are operating at a Level-of-Service “A” during AM and PM Peak Hours. Analysis indicates that this intersection would operate at a Level-of-Service “A” during future AM and PM Peak Hours.

## FINDINGS AND RECOMMENDATIONS

### 1) Project Specific Findings:

- Capacity analysis indicates that traffic generated by the project will not cause any significant changes in Level-of-Service for surrounding intersections;
- The Study substantiates that trip generation associated with senior/age restricted housing is generally lower than non-age restricted developments;
- It is recommended that at each proposed site driveway, clearing of vegetation should take place within the right-of-way and along the site frontage to ensure adequate sight distances for entering and existing vehicles.

### 2) Non-specific Related Findings and Recommendations: (to be performed by the Town)

- Vegetation clearing and pruning should be performed at each of the intersections analyzed along Old Crompond Road to ensure and maintain adequate sight distances;

- At the intersection of Jacob Road and Catherine Street, sight distance improvements and the installation of a double yellow centerline, solid white stop line and a double yellow centerline along Jacob Road should be provided, regardless of the proposed project being built;
- A painted stop bar should be installed at the intersection of Catherine Street and Old Crompond Road;
- Sight distances should be improved (vegetation clearing and pruning) at the intersection of Garden Lane and Old Crompond Road within the right-of-way looking both east and west. In addition, a “stop” line should be provided on the Garden Lane approach;
- An analysis of potential signalization at the intersection of Garden Lane and US Route 202 indicates that under current conditions, signal warrants are not satisfied.

Based on the above analysis, similar Levels of Service and delays will be experienced at the area intersections under the future No-Build and future Build Conditions; 2026 Build Peak AM and PM levels will also be similar in that expected Weekday Peak Hour traffic conditions will occur 7:30 AM to 8:30 AM and 5:00 PM to 6:00 PM, respectively. Given the Study findings, the proposed active adult residential development traffic is not expected to cause any significant impact in overall operation.

#### Item 14 – Impact on Energy

The amount of electricity demand generated by the proposed development is 11,400 to 21,600 kilowatt-hours (kWhs) annually. Both New York Con-Edison and the New York State Electric & Gas Corporation service the Town of Yorktown. Given the recognized need to provide services to area demands for the Town, including allowances for new land use development, the service providers are expected to meet the demand for electricity demanded by the proposed development. It is important to note that the Applicant plans to utilize state-of-the-art lighting and equipment (i.e., lighting fixtures and appliances) which has and continues to meet the goal of State energy efficient programs, as well as provide suitable construction materials manufactured to reduce energy waste and thereby conserve energy.

#### Item 15 – Impact on Noise, Odor and Lighting (a.)

##### Noise & Odors

As noted, operation of heavy equipment and trucks for hauling earth and housing construction materials during construction development hours will occasionally result in exceedances of existing noise levels for immediately surrounding area properties. Also, building construction activities including carpentry and masonry trades will generate noise, but to a much lesser degree than the operation of heavy equipment and trucks. As with typical housing construction, these activities will be staged at varying durations and locations within the development during noted hours of construction. As such, noise will not always be generated on a continuous basis, thereby serving to minimize potential noise (nuisance) impacts. As development construction continues, beyond site preparation and utility installations, the use of

heavy equipment and material transport trucks will be reduced and both indoor and outdoor home site construction activities will generate much less noise levels compared to heavy equipment and transport truck traffic.

It is important to note that all heavy equipment and material transport trucks will operate with muffler devices to further minimize noise potential. Backup safety beepers on equipment and vehicles will be activated to a much lesser degree than that of equipment and vehicle operations. Existing remaining forested vegetation along the northern, eastern limits of the development will serve to buffer and distance construction noise to a significant extent. Overall, the timing and various types of construction noise will be reduced over the single-phase period the development is proposed to be completed.

### Lighting Design

Dark Sky Compliant Street fixtures and typical residential lighting fixtures (lighted pathways and security lighting) will be incorporated into the development which will consist of state-of-the-art LED fixtures designed to significantly reduce off-site glare and excessive brightness. The overall lighting design will adhere to Town standards for required footcandle values, with no overfill onto adjoining properties, in accordance with Town Code, Chapter 200, Lighting, Outdoor. The proposed design will be contained as part of a Utility Plan for Town Planning Board review and approval.

### Item 17 - Consistency with Community Plans (c.):

A vision of the Town's Comprehensive Plan, adopted June 15, 2010, seeks in part to promote housing diversity, including age-restricted developments, to serve a growing demographic in Yorktown and surrounding area of empty nesters and active adults to "age in place." (2010 Comprehensive Plan at 5-25). The proposed project will satisfy an important demand for housing within the Town of Yorktown and Westchester County for 55+ age restricted housing, as well as minimize impacts to on-site natural resources.

Another important aspect of the project is to preserve and protect the historic resources of the Field Home, listed as a historic resource within the Town's Comprehensive Plan due to its "association with Town history." (2010 Comprehensive Plan at 6-8). The Applicant has retained an Architect to investigate and document the various timeless historic aspects of the Field Home building and recommend options for the adaptive reuse of the Field Home to continue its historic tradition to support the local community. This will encourage the ongoing use and re-use of the Field Home, an important historic structure, by either the Town of Yorktown or private property owners, while protecting the historical and architectural attributes of this structure.

With respect to recreational resources, Goal 9-K of the 2010 Comprehensive Plan encourages the Town to "[u]se innovative funding mechanisms to pay for park expansion and maintenance, helping to keep park costs under control." (2010 Comprehensive Plan at 9-2). The Applicant's proposal to contribute \$150,000 towards improvements at the Upper Hunter Brook Field so that the Town will have a significantly upgraded - and permanent - field to accommodate soccer games and other active recreation would facilitate this goal.

The Comprehensive Plan also calls for protecting natural resources and protecting scenic resources by ensuring development is sited in manner protects critical resources and open space. (2010 Comprehensive Plan at 6-12; 7-1; 7-7). The project would facilitate these goals by limiting development to a portion of the Site away from existing wetlands and watercourses. By way of example, the Applicant has modified its development plan to reduce disturbance of an intermittent stream and significantly reduce buffer encroachment, as discussed with the Town's Wetland Consultant during a field visit. In addition, the modification served to eliminate any impervious surfaces within the buffer.

The Applicant is also proposing to record a conservation easement against an approximately 14.3-acre portion of the Site where a wetland and other environmentally sensitive areas are located to ensure no development may occur in this area in the future (2010 Comprehensive Plan at 7-18).

The Applicant also recognizes the importance to mitigate potentials for aesthetics impacts to the Aqueduct Trail located beyond the northern boundaries of the development. This will be accomplished by providing supplemental native vegetation screening along the northern boundaries of the site, consistent with policy 7-15 of the Comprehensive Plan. (2010 Comprehensive Plan at 7-11).

#### Sewer and Water Services

The proposed sewer and water supply systems are currently being confirmed by the Applicant, in consideration of the Town Engineer's recent review findings that the systems may not provide service for the development. In light of this, the Applicant will work with their engineering consultants jointly with the Town Engineer's office to address service needs for the development.

#### Item 18 - Consistency with Community Character; (b.):

The proposed development would be consistent with the existing pattern of development in the area along Catherine Street. The Project Site is across Catherine Street from the Glassbury Court at Hunterbrook development, which is also a 55+ community. This community consists of 64 townhouse units, covering approximately 45-acres with two curb cuts along Catherine Street, which is also proposed by the Field Home development. Similar to the proposed development, Glassbury offers various on-site recreation amenities for its residents, such as a clubhouse and pool.

The east side of Catherine Street is also developed with several senior living health facilities and related uses, covering approximately 48.06-acres. This includes the Yorktown Rehabilitation and Nursing Center, a three-story residential and out-patient health center. It also includes the Yorktown Assisted Living Residence, an 85-bed senior living community on approximately 27.0-acres. In addition, the Field Home Building is used as offices for the Field Home Foundation, a private entity focused on improving the lives of older adults and their caregivers.

## Fiscal Analysis

In addition, tax revenues generated by the development are expected to meet the demand for Town services including schools which are least demanded by 55+ housing developments. The proposed project will result in an additional demand for community services including Town and County and schools.

During May 2022, the Applicant retained the service of Cronin & Cronin, Law Firm, PLLC to prepare a real estate property tax projection evaluation for the Field Home project. The evaluation was based on its physical condition on May 1 with a valuation date of July 1 of the previous year (fiscal period January 1<sup>st</sup> through December 31<sup>st</sup> 2023). All estimates were based on current New York State law; the tax projection evaluation did not include any exemptions the subject property may be eligible to receive. An Assessment Equalization Rate of 1.93 (dated 2022) was utilized for the tax projection. Further, an anticipated annual tax rate of 2 to 5 percent was considered for the Town, Cunt, School and Special District tax jurisdictions evaluated (considering a 2% tax cap); each Townhouse unit was assumed to be on its own tax lot. The average sale price determined by the Applicant for the assessment was \$862,995.

Two parcels which comprise the property site were considered, 35.12-1-2 and 35.08-1-45. The projected project build date was 2023 for the proposed 118 units (age-restricted, 3-bedroom townhouse units) on the 50.51-acre site. Section 508 of the New York Consolidated Laws, "Tax Law" was considered for the assessment. A report entitled "Real Estate Property Tax Project Report," prepared by Cronin & Cronin, PLLC is provided under Attachment H which provides additional assumptions and applicable New York State laws considered.

The following three properties were used in the Assessment Analysis, which are in the same area as the subject property site:

- Comp 1:      Property Address: Glassbury Court: 2265 Dalton Drive  
                 Tax Map # 35.12-1-1.27-54  
                 Property Type: Condo  
                 Assessment: 7,100  
                 Full Market Value: \$334,905  
                 SF: 2,265  
                 Value per SF: \$148  
                 Taxes 21/22: \$8,074  
                 Taxes per SF: \$3.56
- Comp 2:      Property Address: Glassbury Court: 1806 Summerhill Court  
                 Tax Map # 35.12-1-1.19-37  
                 Property Type: Condo  
                 Assessment: 6,800  
                 Full Market Value: \$320,754  
                 SF: 2,265  
                 Value per SF: \$142  
                 Taxes 21/22: \$7,733  
                 Taxes per SF: \$3.41

The annual tax projections assessed by Cronin & Cronin, PLLC, with and without the project, are as follows:

Projected Tax Burden as Fully Constructed:	Year	Total Projected Assessed Value	Combined Tax Rate	Est. Taxes	Est. Taxes Per Unit
	2023	895,939	1,440.422	\$1,290,529.83	\$10,936.69

Portion	Total Projected Assessed Value	Current Tax Rate	Est. Annual Taxes	Est. Annual Per Unit
Town/County	895,939	439.267740	\$393,557.10	\$3,335.23
School	895,939	1,001.154	\$896,972.73	\$7,601.46
<b>Total</b>	<b>895,939</b>	<b>1,440.422</b>	<b>\$1,290,529.83</b>	<b>\$10,936.69</b>

A summary of the Income Approach Analysis completed by Cronin & Cronin, PLLC, for generating the above tabulated projected taxes, is as follows:

**LAND ACRES: 50.51 = 2,200,215.6 SQ.FT.**

**TAX MAP #** 35.12-1-2  
35.08-1-45

**ADDRESS:** 2302 CATHERINE STREET

**2021/22**

**VALUATION DATE:**

**July 1<sup>st</sup>**

**TENANT/TYPE:**

Condos

Units 118  
Rental Rate \$4,500  
Gross \$6,372,000

**TOTAL UNTIS:**

118

**POTENTIAL GROSS INCOME**

**\$6,372,000**

**VACANCY:**

**5%**

**EFFECTIVE GROSS EXPENSES:**

**6,053,400**  
**25%**

**NET OPERATING INCOME:**

**4,540,050**

**CURRENT TAXES**

**184,806**

**TOTAL CAP RATE INCLUDING TAX FACTOR:**

**9.78**

**FULL VALUE:**

**46,421,718**



**EQUALIZATION RATE:**

0.0193

**NEW AV.**

**895,939**

**VALUE PER  
UNIT:**

**393,404**

Presented below is a detailed summary of Annual Property Tax Revenues compared to Total Annual Public Cost jurisdictions and resulting total annual net surpluses.

**ANNUAL FISCAL IMPACTS**

The following calculations model the impact of the proposed development on the 2021/22 Town of Yorktown, Westchester County, and Yorktown School District budgets, as though the homes were already built out and occupied. See attached spreadsheets for detailed calculations.

	Annual Property Taxes	Total Annual Public Revenues	Annual Net Surplus Costs
TOTAL TOWN SERVICES: (General Fund, Highway Fund, + all Special Districts)	\$271,685	(\$163,676)	\$108,010
COUNTY SERVICES: (All Westchester County Operations)	\$121,874	(\$109,151)	\$12,724
SCHOOL SERVICES: (Yorktown School District)	\$896,969	\$0	\$896,969
<b>TOTALS:</b>	<b>\$1,290,529</b>	<b>(\$272,826)</b>	<b>\$1,017,702</b>
<b>TOTAL ANNUAL NET SURPLUS (PUBLIC) REVENUE</b>			<b>\$1,017,702</b>
<b>Average Net Surplus Per New Home (Average of 118 Units)</b>			<b>\$8,625</b>

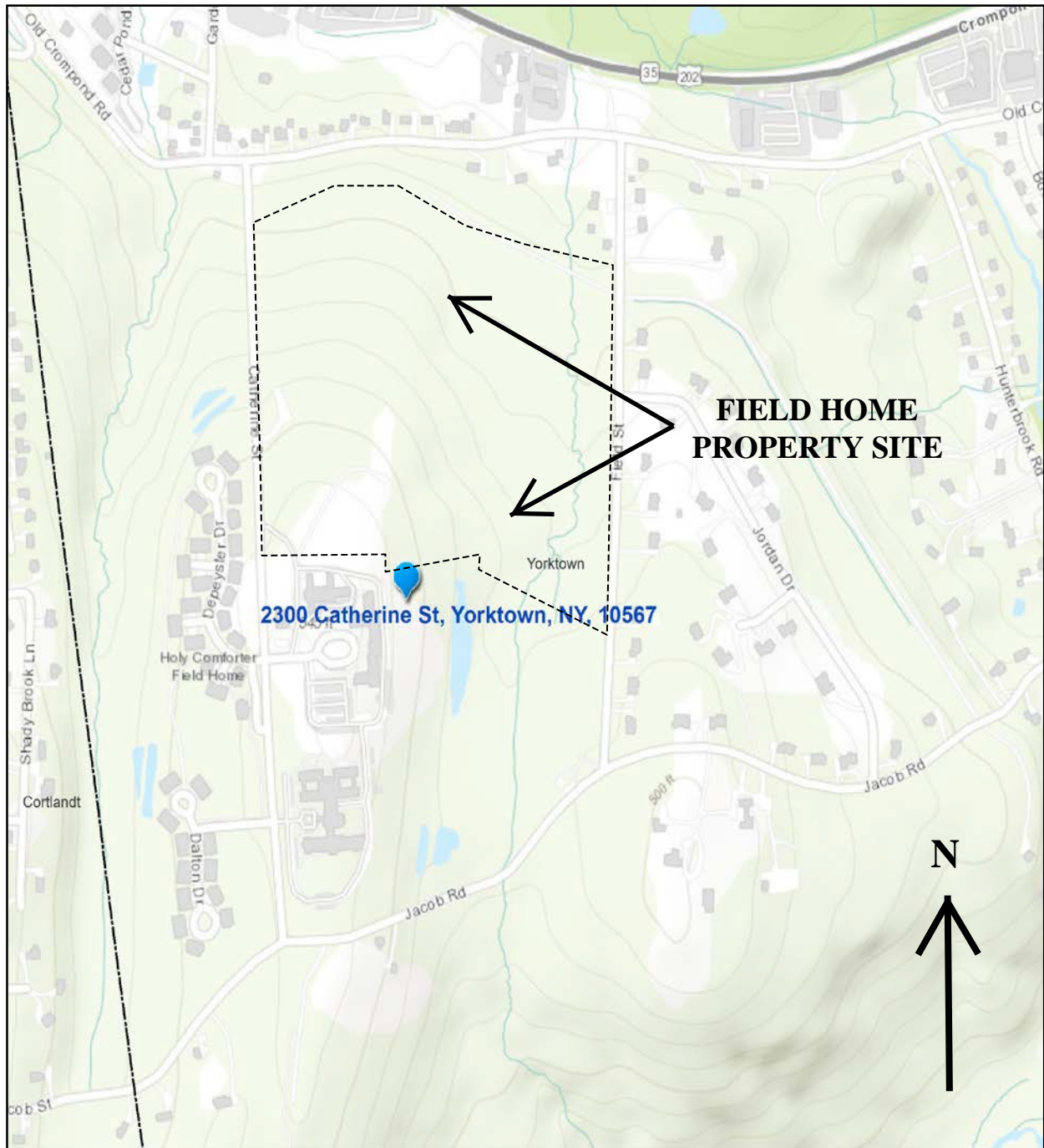
Based on the above assessment, a considerable amount of taxes will be generated by the proposed project which will more than off-set the cost of the tax jurisdictions considered. As such, potential fiscal impacts are expected to result in a positive impact for the Town, County and School district whereby an annual net surplus of \$1,017,702, representing \$8,625 per unit, will be realized with the project.

## **FIGURES**

**FIGURE 1 – SITE LOCATION MAP**

**FIGURE 2 – FIELD HOME  
CONCEPTUAL ARCHITECTURE**

**FIGURE 3 – ZONING ANALYSIS OF  
PREFERRED BUILDING HEIGHT**



NOT-TO-SCALE



ENVIRONMENTAL  
COMPLIANCE SERVICES, INC.  
*Environmental Consulting*

**FIGURE – 1**  
**SITE LOCATION MAP**  
**FIELD HOME**  
**2300 CATHERINE STREET**  
**TOWN OF YORKTOWN,**  
**WESTCHESTER COUNTY, NEW YORK**





**FRONT ELEVATIONS**

SOURCE: TOLL BROTHERS, 2022;

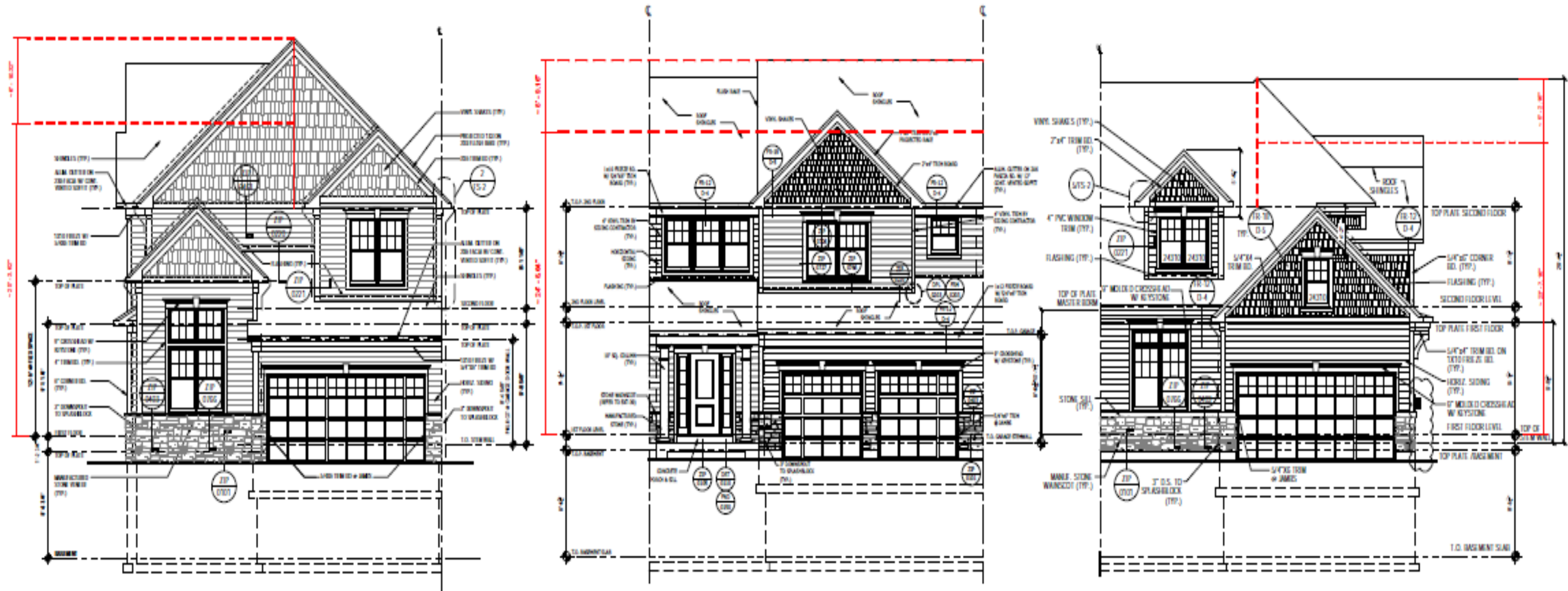


ENVIRONMENTAL  
COMPLIANCE SERVICES, INC.  
*Environmental Consulting*

**FIGURE-2**

**FIELD HOME  
CONCEPTUAL ARCHITECTURE**

**2300 CATHERINE STREET  
TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK**



**PLAN #1**  
 +/- 25'-4" TO MIDPOINT OF ROOF

**PLAN #2**  
 +/- 24'-6" TO MIDPOINT OF ROOF

**PLAN #3**  
 +/- 23'-7" TO MIDPOINT OF ROOF

SOURCE: TOLL BROTHERS, 2022;



ENVIRONMENTAL  
 COMPLIANCE SERVICES, INC.  
 Environmental Consulting

**FIGURE-3**  
**ZONING ANALYSIS OF**  
**PREFERRED BUILDING HEIGHT**  
**FIELD HOME**  
**2300 CATHERINE STREET**  
**TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK**

**ATTACHMENT A**

**SITE PLAN**





**SITE DATA:**  
 OWNER / DEVELOPER: TOLL BROTHERS  
 42 OLD RIDGEBURY ROAD  
 DANBURY, CONNECTICUT, 06810  
 2448 CATHERINE STREET  
 YORKTOWN, NY, 10598  
 PROJECT LOCATION: RSP-3, AGE ORIENTED GERIATRIC COMMUNITY, R1-40 RESIDENTIAL  
 EXISTING TOWN ZONING: RSP-2, SENIOR CITIZENS DISTRICT  
 PROPOSED USE: SECTION 35.12, BLOCK 1, LOT 2, SECTION 35.08, BLOCK 1, LOT 45  
 TOWN TAX MAP DATA: 32.8 ACRES (1,429,304 SF)  
 SITE AREA: 32.8 ACRES (1,429,304 SF)  
 SEWAGE FACILITIES: PUBLIC SEWERS  
 WATER FACILITIES: PUBLIC WATER FACILITIES

**ZONING SCHEDULE:**

ZONING DISTRICT	RSP-2 SENIOR CITIZEN DISTRICT		
	REQUIRED	PROVIDED	VARIANCE REQUIRED
MINIMUM SIZE OF LOT:			
MINIMUM LOT AREA:	217,800 SF	1,429,304 SF	NONE
MINIMUM LOT WIDTH:	150 FT	1,362 FT	NONE
MINIMUM LOT DEPTH:	150 FT	1,586 FT	NONE
MINIMUM YARD DIMENSIONS:			
PRINCIPAL BUILDING:			
FRONT YARD SETBACK:	50 FT	55.0 FT	NONE
REAR YARD SETBACK:	50 FT	493 FT	NONE
ONE SIDE YARD SETBACK:	50 FT	75.0 FT	NONE
COMBINED SIDE YARD SETBACK:	100 FT	174.6 FT	NONE
MAXIMUM HEIGHT:			
PRINCIPAL BUILDING - FEET:	45 FEET	38 FT MAX	NONE
F.A.R. (FLOOR AREA RATIO):	0.35	0.15	NONE

**PARKING SCHEDULE:**

REQUIRED PARKING:	0.5 SPACES PER DWELLING UNIT
PROVIDED PARKING:	118 UNITS @ 0.5 SPACES/UNIT = 59 SPACES
PARKING VARIANCE REQUIRED:	0 SPACES

**Site Design Consultants**  
 Civil Engineers, Land Planners  
 251-F Underhill Avenue, Yorktown Heights, NY 10598  
 (914) 962-4488 - Fax: (914) 962-7386  
 www.sitedesignconsultants.com

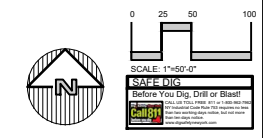


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**PRELIMINARY SITE PLAN**

PRELIMINARY SITE PLAN  
 PREPARED FOR:  
 FIELDHOME AT CATHERINE STREET  
 CATHERINE STREET  
 Yorktown  
 Westchester County

**NOTE:**  
 THIS IS NOT A SURVEY. ALL SURVEY INFORMATION SHOWN ON THIS PLAN HAS BEEN TAKEN FROM SURVEY MAPS PREPARED BY NAME OF SURVEYOR, DATED XXXXXX, LAST REVISED XXXXXX. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.  
 UNAUTHORIZED ALTERATIONS OR ADDITIONS TO THIS DRAWING IS A VIOLATION OF SECTION 2201(2) OF THE NEW YORK STATE EDUCATION LAW.



**ATTACHMENT B**

**EXISTING CONDITIONS PLAN**

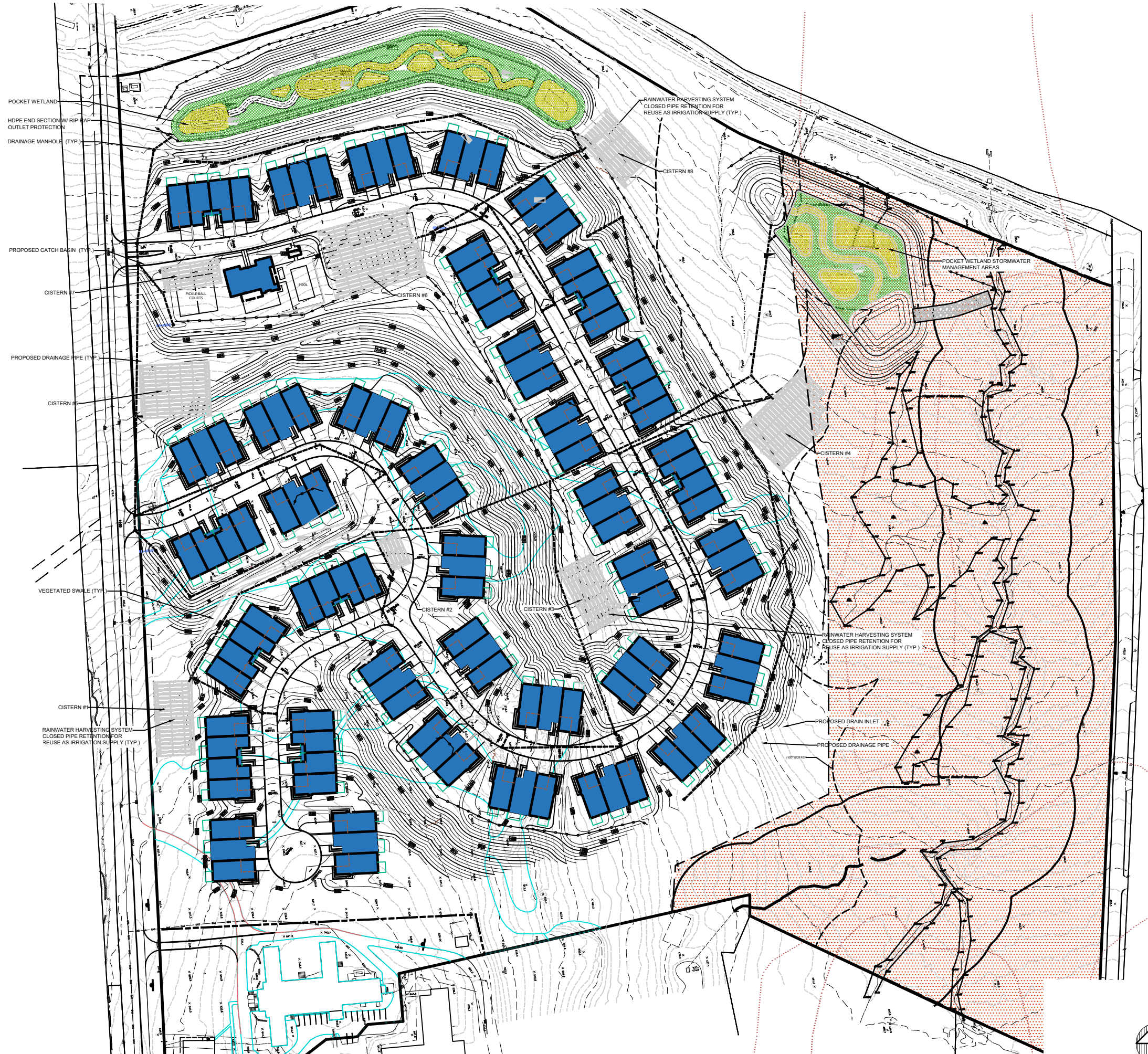




**ATTACHMENT C**

**STORMWATER MANAGEMENT PLAN**





POCKET WETLAND  
 HDPE END SECTION W/ RIP-RAP  
 OUTLET PROTECTION  
 DRAINAGE MANHOLE (TYP.)

PROPOSED CATCH BASIN (TYP.)

PROPOSED DRAINAGE PIPE (TYP.)

CISTERN #7

VEGETATED SWALE (TYP.)

CISTERN #1

RAINWATER HARVESTING SYSTEM  
 CLOSED PIPE RETENTION FOR  
 REUSE AS IRRIGATION SUPPLY (TYP.)

RAINWATER HARVESTING SYSTEM  
 CLOSED PIPE RETENTION FOR  
 REUSE AS IRRIGATION SUPPLY (TYP.)

CISTERN #8

POCKET WETLAND STORMWATER  
 MANAGEMENT AREAS

CISTERN #4

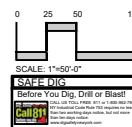
RAINWATER HARVESTING SYSTEM  
 CLOSED PIPE RETENTION FOR  
 REUSE AS IRRIGATION SUPPLY (TYP.)

PROPOSED DRAIN INLET

PROPOSED DRAINAGE PIPE

100' BUFFER

**NOTE:**  
 THIS IS NOT A SURVEY. ALL SURVEY INFORMATION SHOWN ON THIS PLAN HAS BEEN  
 TAKEN FROM SURVEY MAP PREPARED BY BARD CARPENTER ENGINEERS, INC. DATED  
 10/12/12. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ITS ACCURACY.



PRELIMINARY SITE PLAN  
 PREPARED FOR  
 FIELDHOME AT CATHERINE STREET  
 CATHERINE STREET  
 Town of Yorktown  
 Westchester County

**PRELIMINARY  
 STORMWATER PLAN**

SCALE: 1" = 50'  
 DRAWN BY: TK  
 DATE: 03/22

Prepared by:  
 Joseph C. Rima, P.E.  
 NYS Lic. No. 04411

**Site Design Consultants**  
 Civil Engineers, Land Planners  
 251-F Underhill Avenue, Yorktown Heights, NY 10598  
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 www.sitedesignconsultants.com



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**ATTACHMENT D**

**WETLAND FUNCTIONAL ANALYSIS, PREPARED  
BY ECOLOGICAL ANALYSIS, LLC, DATED  
FEBRUARY 8, 2024**

# Wetlands Functional Analysis

Project:

Catherine Street Project

Town of Yorktown  
Westchester County, NY

Prepared By:  
James Bates

ECOLOGICAL ANALYSIS, LLC  
633 Route 211 East  
Suite 4 Box 4  
Middletown, New York 10941  
(845) 495-0123

February 8, 2024



633 Route 211 East • Suite 4, Box 4 • Middletown, NY 10941 • Phone: 845-495-0123  
• Fax: 866-688-0836 • [www.4ecological.com](http://www.4ecological.com)

## **Site Wetlands, Streams, and Existing Conditions**

The areas of the project site that have been designated as either watercourses (streams) or wetlands were originally delineated in October of 2021, and further updated during site visits by regulatory personnel in September and October of 2022. The latter two site visits allowed for site wetland and watercourse inspections by the Town's wetland consultant and by an agency representative from the New York City Department of Environmental Protection. The subject site includes two areas of wetland, Wetland "C" and Wetland "H", as shown on the Existing Conditions survey of the property.

Wetland "C" is the more extensive of the two site wetlands, and its flagged boundaries include several watercourses which emanate from within upper sections of the wetland, then drain into a stream watershed that extends both upstream and downstream of the flagged wetland areas. Two areas of Wetland "C" were delineated at and around headwater locations of this stream watershed. These areas, wetland Area "C1" (~1.05 acres) and wetland Area "C2" (~0.15 acres), are each characterized separately in the analyses that follow.

Wetland Area "C1" is largely dominated by monotypic stands of the invasive, non-native common reed (*Phragmites australis*). These dense stands of reed are surrounded by areas of forested wetland and uplands. Ecological functions are typically diminished in areas invaded by *Phragmites* as they form barriers that are nearly impenetrable to most larger forms of wildlife, with the exception of being able to provide temporary refugia for deer. The larger size of this wetland does allow for it to provide some water quality functions, including groundwater recharge/discharge, stormwater discharge mitigation, and export of plant nutrients following the seasonal breakdown of non-woody vegetation. The shallow, intermittent flooding observed within this wetland would not allow for its use for breeding by most amphibian species, with the possible exception of American toads, which have a relatively short developmental cycle.

Wetland Area "C2" is an area vegetated largely by native species of wetland trees, shrubs, ferns, and forbs, including red maple, spicebush, witchhazel, arrowleaf tearthumb, and cinnamon fern. With a more complex, multi-tiered, community of vegetation, this wetland area would provide relatively greater ecological functioning that would benefit a greater variety of local wildlife species, allowing for limitations presented by its small area. As also noted above for Area "C1," the shallow, intermittent flooding observed within Area "C2" would limit its use for egg deposition by most amphibians. Due to the relatively low volume of water that this wetland can retain, it would not provide substantial opportunities for physical or chemical alteration of its captured runoff or groundwater flows.

Wetland Area "H" (~0.08 acres) is a small forested wetland fed by hillside runoff on a gently sloping area that is only thinly vegetated by native wetland forbs and shrubs. This is a seasonally flooded, shallow, wetland that, in combination with the general lack of vegetated cover, would not be expected to have habitat value for many species of local wildlife. Breeding by species of aquatic amphibians would not be expected to occur within the shallow, intermittent waters that occur within this wetland. As noted for Area "C2" above, due to

the low volume of water that this wetland can retain, it would not provide substantial opportunities for physical or chemical alteration of its captured runoff or groundwater flows.

Each of these three onsite wetland areas was assigned a Cowardin habitat classification code<sup>1</sup> based on its observed vegetation and hydrology. These codes are identified on the attached data forms for each area.

All of these onsite areas of streams and wetlands, and their town regulated 100' adjacent areas, are outside of the limits of disturbance of the proposed project and will remain as areas of unimpacted habitat on the property.

### **Wetland Functions and Values**

Wetlands provide several functions and values that were evaluated for the onsite wetlands during the project planning process for the Catherine Street project site. The basis for the following characterization of the existing conditions observed within the three site wetland areas is the published methodology<sup>2</sup> of the US Army Corps of Engineers (USACOE), New England District. This qualitative, descriptive methodology was adopted by the USACOE in 1999 to provide a useful evaluation of the physical characteristics of wetlands. It defines Wetland Functions to be "self-sustaining properties of a wetland ecosystem that exist in the absence of society." Wetland Values are associated with the physical properties of a wetland that have potential societal impacts.

The eight functional characteristics utilized in this methodology include:

1. Groundwater recharge/discharge;
2. Flood flow alteration;
3. Fish and shellfish habitats;
4. Sediment/toxicant/pathogen retention;
5. Nutrient removal/retention/transformation;
6. Production export;
7. Sediment/shoreline stabilization;
8. Wildlife habitats.

The five values characteristics utilized in this methodology include:

1. Recreation (Consumptive and Non-Consumptive);
2. Educational/Scientific;
3. Uniqueness/Heritage;
4. Visual Quality/Aesthetics;
5. Threatened/Endangered Species Habitat.

---

<sup>1</sup> Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deep-water Habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

<sup>2</sup> USACOE. 1999. Wetland Functions and Values – A Descriptive Approach. Pub No. NAEEP-360-1-30a. 32 pp.

Using the USACOE document as a format, each of the above eight functions, and five values, were assigned specific rationales which were then used to characterize the applicable features of the wetland areas being evaluated. These qualifying considerations for the various functions and values are itemized on the following pages. Reference numbers were then assigned to each of the itemized qualifiers, and the applicable set of Reference Numbers were listed on the Evaluation Forms created for each of the three wetland areas in consideration.

The completed Wetland Function-Value Evaluation Forms for each of the three wetland areas delineated on the Catherine Street project site are presented at the end of this section. As characterized on these evaluation forms, groundwater recharge/discharge is the one principal function that is shared by all three of these shallow, intermittently flooded wetlands. The two other principal functions attributed to the wetlands on this site were limited to wetland Area "C1." This wetland area has the potential to provide some mitigation of stormwater flows and to also allow for the export of larger amounts of plant nutrients from its more densely vegetated plant community.



## **FUNCTIONAL CATEGORIES:**

- 1) **GROUNDWATER RECHARGE/DISCHARGE**
- 2) **FLOOD FLOW ALTERATION**
- 3) **FISH AND SHELLFISH HABITATS**
- 4) **SEDIMENT/TOXICANT RETENTION**
- 5) **NUTRIENT REMOVAL**
- 6) **PRODUCTION EXPORT**
- 7) **SEDIMENT/SHORELINE STABILIZATION**
- 8) **WILDLIFE HABITATS**

**1) GROUNDWATER RECHARGE/DISCHARGE:**

**This function considers the potential for a wetland to serve as a groundwater recharge and/or discharge area.**

**RATIONALE REFERENCE NUMBERS:**

1. Public or private wells occur downstream of the wetland.
2. Potential exists for public or private wells downstream of the wetland.
3. Wetland is underlain by a stratified drift aquifer.
4. Gravel or sandy soils present in or adjacent to the wetland.
5. Fragipan does not occur in the wetland.
6. Fragipan, impervious soils, or bedrock does occur in the wetland.
7. Wetland is associated with a perennial or intermittent watercourse.
8. Signs of groundwater recharge are present.
9. Wetland is associated with a watercourse but lacks a defined outlet or contains a constricted outlet.
10. Wetland contains only an outlet, no inlet.
11. Groundwater quality of stratified drift aquifer within or downstream of wetland meets drinking water standards.
12. Quality of water associated with the wetland is high.
13. Signs of groundwater discharge are present (e.g., springs).
14. Wetland shows signs of variable water levels.

## 2) FLOOD FLOW ALTERATION:

**This function considers the effectiveness of a wetland in reducing flood damage by water retention for prolonged periods following precipitation events and the gradual release of floodwaters.**

### **RATIONALE REFERENCE NUMBERS:**

1. Area of this wetland is large relative to its watershed.
2. Wetland occurs in the upper portions of its watershed.
3. Effective flood storage is small or non-existent upslope of the wetland.
4. Wetland watershed contains a high percent of impervious surfaces.
5. Wetland contains hydric soils which are able to absorb and detain water.
6. Wetland exists in a relatively flat area that has flood storage potential.
7. Wetland has an intermittent outlet, ponded water, or signs are present of a variable water level.
8. During flood events, this wetland can retain higher volumes of water than under normal or average rainfall conditions.
9. Wetland receives and retains overland or sheet flow runoff from surrounding upland
10. In the event of a large storm, this wetland may receive and detain excessive flood water from a nearby watercourse.
11. Valuable properties, structures, or resources are located in or near the floodplain downstream from the wetland.
12. The watershed has a history of economic loss due to flooding.
13. This wetland is associated with one or more watercourses.
14. This wetland watercourse is sinuous or diffuse.
15. This wetland outlet is constricted.
16. Channel flow velocity is affected by this wetland.
17. Land uses downstream are protected by this wetland.
18. This wetland contains a high density of vegetation.

### 3) FISH AND SHELLFISH HABITATS:

This function considers the use of a wetland, and its intermittent or perennial watercourses, by fish and shellfish populations.

#### RATIONALE REFERENCE NUMBERS:

1. Wetland is stocked with fish.
- 2.. Evidence of fish populations is observed.
3. Forest land dominant in the watershed above this wetland.
4. Vegetation or other objects providing cover is present.
5. Size of this wetland is able to support large populations of fish/shellfish.
6. Wetland has sufficient size and depth in open water areas so as not to freeze solid during winter.
7. Spawning areas are present (sandy shoreline, submerged vegetation, or gravel beds).
8. Food is available to fish/shellfish populations within this wetland.

#### → STOP HERE IF THIS WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE

9. Wetland is part of a larger, contiguous watercourse.
10. Watercourse width (bank to bank) is more than 50 feet.
11. Quality of the watercourse associated with this wetland is able to support healthy fish/shellfish populations.
12. Streamside vegetation provides shade for the watercourse.
13. Barriers to anadromous fish (such as dams, waterfalls, road crossing) are absent from the stream reach associated with this wetland.
14. The watercourse is persistent.
15. Man-made streams are absent.
16. Watercourse flow velocities are not too excessive for fish inhabitation.
17. Defined stream channel is present.

#### 4) SEDIMENT/TOXICANT RETENTION:

This function considers the reduction or prevention of the degradation of water quality. It relates to the effectiveness of a wetland as a trap for sediments, toxicants, or pathogens in runoff water from surrounding uplands or upstream areas. Dissolved or suspended matter in the inflowing water can be retained, removed, or modified by biotic and abiotic processes occurring within the wetland.

##### RATIONALE REFERENCE NUMBERS:

1. Potential sources of excess sediment are in the watershed above the wetland.
2. Potential or known sources of toxicants are in the upper watershed.
3. Opportunity for sediment trapping by slow moving water or deepwater habitat are present in this wetland.
4. Fine grained mineral or organic soils are present.
5. Long duration water retention time is present in this wetland.
6. Public or private water sources occur downstream.
7. The wetland edge is broad and intermittently aerobic.
8. The wetland is known to have existed for more than 50 years.
9. Drainage ditches have not been constructed in the wetland.
10. Wetland has a high degree of water and vegetation interspersion.
11. Dense vegetation provides opportunity for sediment trapping and/or signs of sediment accumulation by dense vegetation is present.

##### → STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

12. Wetland is associated with an intermittent or perennial stream or a pond.
13. Channelized flow velocities are observed to decrease in the wetland.
14. Effective floodwater storage in wetland is occurring. Areas of impounded open water are present.
15. No indicators of erosive forces are present. No fast water velocities are present.
16. Diffuse water flows are present in the wetland.

## 5) NUTRIENT REMOVAL:

This function considers the effectiveness of a wetland as a trap for nutrients in runoff water, and the ability of the wetland to process these nutrients into other forms or trophic levels.

### RATIONALE REFERENCE NUMBERS:

1. Wetland is large relative to the size of its watershed.
2. Deep water or open water habitat exists.
3. Overall potential for sediment trapping exists in the wetland.
4. Potential sources of excess nutrients are present in the watershed above the wetland.
5. Wetland is ponded or has saturated soils for most of the season.
6. Deep organic/sediment deposits are present.
7. Slowly drained fine-grained mineral or organic soils are present.
8. Dense vegetation is present.
9. Emergent vegetation and/or dense woody growths are dominant.
10. Opportunity for nutrient removal exists.
11. Vegetation diversity/abundance sufficient to utilize nutrients.

→ STOP HERE IF WETLAND IS NOT ASSOCIATED WITH A WATERCOURSE.

12. Waterflow through this wetland is diffuse.
13. Water retention/detention time in this wetland is increased by constricted outlet or thick vegetation.
14. Water moves slowly through this wetland.

## **6) PRODUCTION EXPORT:**

**This function evaluates the effectiveness of a wetland to produce food or usable products for consumer species of wildlife.**

### **RATIONALE REFERENCE NUMBERS:**

1. Wildlife food sources are present within this wetland.
2. Detritus development is present within this wetland
3. Evidence of wildlife use found within this wetland.
4. Higher trophic level consumers are utilizing this wetland.
5. Fish or shellfish are present within this wetland.
6. High vegetation density is present.
7. Wetland exhibits high degree of plant community structure/species diversity.
8. Nutrients are exported via wetland watercourses (permanent outlet present).
9. Flushing of relatively large amounts of organic plant material occurs from this wetland.
10. Wetland contains flowering plants that are used by nectar-gathering insects.
11. High production levels occur, however, no visible signs of export.

## **7) SEDIMENT/SHORELINE STABILIZATION:**

**This function considers the effectiveness of a wetland to stabilize streambanks and shorelines, reducing erosional forces on adjacent uplands.**

### **RATIONALE REFERENCE NUMBERS:**

1. Indications of erosion or siltation are present.
2. Topographical gradient is present in wetland.
3. Potential sediment sources are present up-slope.
4. Potential sediment sources are present upstream.
5. No distinct shoreline or bank is evident between open water and the wetland or upland.
6. A distinct shoreline bank with dense roots throughout is present between the open waterbody or stream and the upland.
7. Wide wetland ( $\geq 10'$ ) bordering a watercourse, lake, or pond.
8. High flow velocities through the wetland.
9. The watershed is of sufficient size to produce channelized flow.
10. Open water fetch is present.
12. Dense vegetation is bordering streams or open water bodies associated with this wetland.
13. High percentage of energy-absorbing emergent vegetation and/or shrubs border watercourse or open water bodies associated with this wetland.
14. Vegetation is comprised of a dense, resilient herbaceous layer that stabilizes sediments and shorelines during minor flood events or other potentially erosive events.
15. Vegetation is comprised of large trees and shrubs that withstand major flood events or erosive incidents and stabilize the shoreline during major flood events or other potentially erosive events.



## **8) WILDLIFE HABITATS:**

**This function considers the effectiveness of a wetland's vegetation, soil, and hydrology to provide habitats for various types and populations of animals typically associated with wetlands or wetland edges, for both resident and/or migratory species.**

### **RATIONALE REFERENCE NUMBERS:**

1. Wetland is not degraded by human activity.
2. Presence of disturbance-intolerant species is indicated.
3. Water quality of the watercourse, pond, or lake associated with this wetland meets or exceeds NYSDEC stream Class A or Class B standards.
4. Wetland is not fragmented by development.
5. Upland surrounding this wetland is undeveloped.
6. More than 40% of this wetland edge is bordered by upland wildlife habitat (e.g., brushland, woodland, active farmland, or idle land) at least 500 feet in width.
7. Wetland is contiguous with other wetland systems or connected by a watercourse or lake.
8. Wildlife overland corridors to other wetlands are present.
9. Wildlife food sources are within this wetland or are nearby.
10. Wetland exhibits a high degree of interspersion of vegetation classes and/or open water.
11. Two or more islands or inclusions of uplands within the wetland are present.
12. Dominant wetland class includes deep or shallow marsh or wooded swamp.
13. More than three acres of shallow permanent open water (less than 6.6 feet deep), including streams in or adjacent to wetland, are present.
14. Wetland exhibits a high density of wetland vegetation.
15. Wetland exhibits a high degree of plant species diversity.
16. Wetland exhibits a high degree of diversity in plant community structure.
17. Wildlife and birdlife, or signs of their presence, observed.
18. Seasonal uses vary for wildlife, and wetland appears to support varied population diversity/abundances during different seasons.
19. Wetland contains or has potential to contain a high population of insects.
20. Wetland contains or has potential to contain substantial populations of amphibians.
21. Wetland provides potential for supporting substantial birdlife.

## **VALUE CATEGORIES:**

- 1) **RECREATION**
- 2) **EDUCATIONAL/SCIENTIFIC VALUE**
- 3) **UNIQUENESS/HERITAGE**
- 4) **VISUAL QUALITY/AESTHETICS**
- 5) **THREATENED/ENDANGERED SPECIES HABITAT**

### 1) RECREATION (Consumptive and Non-Consumptive):

This value considers the suitability of the wetland and associated watercourses to provide recreational opportunities such as hiking, canoeing, boating, fishing, hunting, and other active or passive recreational activities. Consumptive opportunities consume or diminish the plants, animals, or other resources that are intrinsic to the wetland. Non-consumptive opportunities do not consume or diminish these resources of the wetland.

#### RATIONALE REFERENCE NUMBERS:

1. Wetland is part of a recreation area, park, forest, or refuge.
2. Fishing is available within the wetland.
3. Hunting is permitted in the wetland.
4. Hiking occurs or has potential to occur within the wetland.
5. Wetland is a valuable wildlife habitat.
6. The watercourse, pond, or lake associated with the wetland is unpolluted.
7. High visual/aesthetic quality.
8. Access to water is available for boating, canoeing, or fishing.
9. The watercourse associated with this wetland is wide and deep enough to accommodate canoeing and/or non-powered boating.
10. Off-road public parking available at the potential recreation site.
11. The wetland is within a short drive or walk from highly populated areas.

## **2) EDUCATIONAL/SCIENTIFIC VALUE:**

**This value considers the suitability of the wetland as a site for an “outdoor classroom” or as a location for scientific study or research.**

### **RATIONALE REFERENCE NUMBERS:**

1. Wetland contains or is known to contain threatened, rare, or endangered species.
2. Little or no disturbance is occurring in this wetland.
3. Potential educational site contains a diversity of wetland classes which are accessible or potentially accessible.
4. Potential educational site is undisturbed and natural.
5. Wetland is considered to be a valuable wildlife habitat.
6. Wetland is located within a nature preserve or wildlife management area.
7. Signs of wildlife habitat enhancement present (bird houses, nesting boxes, etc.).
8. Off-road parking at potential educational site suitable for school bus access.
9. Potential educational site is within safe walking distance or a short drive to schools.
10. Potential educational site is within safe walking distance to other plant communities.
11. Direct access to perennial stream at potential educational site is available.
12. Direct access to pond or lake at potential educational site is available.
13. No known safety hazards exist within the potential educational site.
14. Public access to the potential educational site is controlled.
15. Handicap accessibility is available.
16. Site is currently used for educational or scientific purposes.

### **3) UNIQUENESS/HERITAGE:**

**This value considers the effectiveness of the wetland to provide certain special values, including archaeological sites, critical habitat for endangered species, a unique role in the local ecology, including any relative importance as a typical wetland for the region.**

#### **RATIONALE REFERENCE NUMBERS:**

1. Upland surrounding wetland is primarily urban.
2. Upland surrounding wetland is developing rapidly.
3. More than 3 acres of shallow permanent open water.
4. Three or more wetland classes are present.
5. Deep and/or shallow marsh or wooded swamp dominate.
6. High degree of interspersed vegetation and open water.
7. Well-vegetated stream corridor (15 feet on each side of the stream) occurs in this wetland.
8. Potential educational site is within a short drive or a safe walk from schools.
9. Off-road parking at potential educational site is suitable for school buses.
10. No known safety hazards exist within this potential educational site.
11. Direct access to perennial stream or lake exists at potential educational site.
12. Two or more wetland classes are visible from primary viewing locations.
13. Half an acre of open water or 200 feet of stream is visible from primary viewing locations.
14. Large area of wetland is dominated by flowering plants or plants that turn vibrant colors in different seasons.
15. General appearance of the wetland visible from primary viewing locations is unpolluted and/or undisturbed.
16. Overall view of the wetland is available from the surrounding upland.
17. Quality of the water associated with the wetland is high.
18. Opportunities for wildlife observations are available.
19. Historical buildings are found within the wetland.
20. Presence of pond or pond site and remains of a dam occur within the wetland.
21. Wetland is within 50 yards of the nearest perennial watercourse.
22. Visible stone or earthen foundations, berms, dams, standing structures, or associated features occur within the wetland.
23. Wetland contains critical habitat for a state- or federally-listed threatened or endangered species.
24. Wetland is known to be a study site for scientific research.
25. Wetland is a natural landmark or recognized by the state natural heritage inventory authority as an exemplary natural community.
26. Wetland has local significance because it serves several functional values.
27. Wetland has local significance because it has biological, geological, or other features that are locally rare or unique.
28. Wetland is known to contain an important archaeological site.
29. Wetland is hydrologically connected to a designated scenic river.
30. Wetland is located in an area experiencing a high wetland loss rate.

#### **4) VISUAL QUALITY/AESTHETICS:**

**This value considers the visual and aesthetic quality or usefulness of the wetland.**

##### **RATIONALE REFERENCE NUMBERS:**

1. Multiple wetland classes are visible from primary viewing locations.
2. Emergent marsh and/or open water are visible from primary viewing locations.
3. A diversity of vegetative species is visible from primary viewing locations.
4. Wetland is dominated by flowering plants or plants that turn vibrant colors seasonally.
5. Land use surrounding the wetland is undeveloped as seen from primary viewing locations.
6. Surrounding land use form contrasts visually with wetland.
7. Wetland views are absent of trash, debris, and other signs of disturbances.
8. Wetland is considered to be a valuable wildlife habitat.
9. Wetland is easily accessed.
10. Low noise level at primary viewing locations.
11. Unpleasant odors are not present at primary viewing locations.
12. Relatively unobstructed sight line exists through wetland.

**5) THREATENED/ENDANGERED SPECIES HABITAT:**

**This value considers the ability of the wetland to offer habitat for state or federal threatened or endangered species habitat.**

**RATIONALE REFERENCE NUMBERS:**

1. Wetland is known to contain threatened or endangered species.
2. Wetland contains critical habitat for threatened or endangered species.



# Wetland Function-Value Evaluation Form

Total area of wetland 1.05 ac Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No  
 Adjacent land use Forest Distance to nearest roadway or other development 225'  
 Dominant wetland systems present PEM5E \* Contiguous undeveloped buffer zone present Yes  
 Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper  
 How many tributaries contribute to the wetland? None

Wetland I.D. Area C1  
 Latitude 41.2856 Longitude 73.8455  
 Prepared by: BRF Date 2-1-2024  
 Wetland Impact: Type None Area N/A  
 Evaluation based on: Office X Field X  
 Corps manual wetland delineation completed? Y X N N

Function/Value	Suitability Y / N	Rationale (Reference #)	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	4, 7, 9, 10, 14	X	Wetland has little relief, retaining shallow pockets of standing water.
Floodflow Alteration	Y	1, 2, 3, 6, 7, 9, 13, 18	X	Wetland is relatively large and retains shallow pockets of water.
Fish and Shellfish Habitat	N	3		Wetland is not permanently flooded.
Sediment/Toxicant Retention	N	3, 4, 5, 9, 11		Wetland slows and detains runoff waters from adjacent forest.
Nutrient Removal	N	1, 3, 5, 7, 8, 9, 10, 11		Wetland removes nutrients from local runoff waters.
Production Export	Y	1, 2, 4, 6, 8	X	Wetland is densely vegetated with phragmites.
Sediment/Shoreline Stabilization	N	2		Perimeter consists of established forest vegetation.
Wildlife Habitat	Y	1, 8, 9, 14, 17, 18, 19		Dominated by common reed and only intermittently flooded.
Recreation	N	6, 11		Wetland is on private property.
Educational/Scientific Value	N	2		Wetland is on private property.
Uniqueness/Heritage	N	2, 7		Wetland has no known unique characteristics.
Visual Quality/Aesthetics	N	5, 6, 7, 10, 11		Wetland is on private property with no viewscape from offsite.
Endangered Species Habitat	N			Location not in vicinity of any known endangered species.
Other				

Notes: \* Palustrine (P) Emergent vegetation (EM) Phragmites reed (5) Seasonally flooded/saturated (E)



# Wetland Area "C1"



Winter view





# Wetland Function-Value Evaluation Form

Total area of wetland ~0.15 Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No  
 Adjacent land use Forest Distance to nearest roadway or other development 350'  
 Dominant wetland systems present PFO1E\* Contiguous undeveloped buffer zone present Yes  
 Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Upper  
 How many tributaries contribute to the wetland? None

Wetland I.D. Area C2  
 Latitude 41.2847 Longitude 73.8454  
 Prepared by: BRF Date 1-9-2024  
 Wetland Impact: Type None Area N/A  
 Evaluation based on: Office X Field X  
 Corps manual wetland delineation completed? Y X N N

Function/Value	Suitability Y / N	Rationale (Reference #)	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	4, 5, 7, 10, 14	X	Wetland is centered on a streambed.
Floodflow Alteration	N	2, 3, 7, 9, 13,		Wetland lacks capacity to retain any significant volume of runoff.
Fish and Shellfish Habitat	N	3		Wetland is not a permanent waterbody.
Sediment/Toxicant Retention	N	4, 9		Wetland lacks capacity to retain runoff for any extended duration..
Nutrient Removal	N	5, 7, 9		Perimeter consists of well stabilized forest vegetation..
Production Export	N	1, 8		Wetland is not densely vegetated.
Sediment/Shoreline Stabilization	N	2, 7		Perimeter consists of established forest vegetation.
Wildlife Habitat	N	1, 4, 5, 6, 7, 8, 9, 18, 19		Wetland area is small and only seasonally wet.
Recreation	N	6, 11		Wetland is on private property.
Educational/Scientific Value	N	2, 14		Wetland is on private property.
Uniqueness/Heritage	N	2, 7, 21		Wetland has no known unique characteristics.
Visual Quality/Aesthetics	N	5, 7, 10, 11, 12		Wetland is on private property with no viewscape from offsite.
ES Endangered Species Habitat	N			Location not in vicinity of any known endangered species.
Other				

Notes: \* Palustrine (P) Forested (FO) Broad-leaved deciduous (1) Seasonally flooded/saturated (E)



# Wetland Area "C2"



Fall view





# Wetland Function-Value Evaluation Form

Total area of wetland ~0.08 ac Human made? No Is wetland part of a wildlife corridor? No or a "habitat island"? No  
 Adjacent land use Forest Distance to nearest roadway or other development ~ 275'  
 Dominant wetland systems present PFO1E Contiguous undeveloped buffer zone present Yes  
 Is the wetland a separate hydraulic system? No If not, where does the wetland lie in the drainage basin? Mid  
 How many tributaries contribute to the wetland? None

Wetland I.D. Area "H"  
 Latitude 41.2873 Longitude 73.8462  
 Prepared by: BRF Date 2-1-2024  
 Wetland Impact: Type None Area N/A

Evaluation based on:  
 Office  Field   
 Corps manual wetland delineation completed? Y  X  N

Function/Value	Suitability Y / N	Rationale (Reference #)	Principal Function(s)/Value(s)	Comments
Groundwater Recharge/Discharge	Y	5, 10, 13, 14	X	Wetland outflow restricted by presence of a stone wall.
Floodflow Alteration	N	3, 15		Wetland lacks capacity to retain any significant volume of runoff.
Fish and Shellfish Habitat	N	3		Wetland does not have any perennial surface water.
Sediment/Toxicant Retention	N	9		Wetland lacks capacity to retain runoff for any extended duration.
Nutrient Removal	N	5		Perimeter consists of well stabilized forest or emergent vegetation.
Production Export	N	1, 2		Wetland is not densely vegetated.
Sediment/Shoreline Stabilization	N	2		Perimeter consists of established forest or emergent vegetation.
Wildlife Habitat	N	1, 4, 5, 6, 8, 9		Wetland area is small, sparsely vegetated, and only seasonally wet.
Recreation	N	11		Wetland is on private property.
Educational/Scientific Value	N	2, 14		Wetland is on private property.
Uniqueness/Heritage	N	2, 21, 22		Wetland has no known unique characteristics.
Visual Quality/Aesthetics	N	5, 7, 10, 11, 12		Wetland is on private property with limited viewscape.
ES Endangered Species Habitat	N			Location not in vicinity of any known endangered species.
Other				

Notes: \* Palustrine (P) Forested (FO) Broad-leaved deciduous (1) Seasonally flooded/saturated (E)



# Wetland Area "H"



Winter view



**ATTACHMENT E**

**COORESPONDENCE FROM THE TOWN OF  
YORKTOWN CONSOLIDATED WATER  
DISTICT DATED MAY 5, 2022**

**YORKTOWN CONSOLIDATED WATER DISTRICT**

1080 Spillway Road, Shrub Oak, NY 10588

Telephone: 914.245.6111

Fax: 914.245.8422

May 5, 2022

**Kevney D. Moses**

**Land Entitlement Manager, NY Metro**

Toll Brothers

42 Old Ridgebury Rd, Danbury, CT 06810

Re: Field Home Catherine St

To Whom It May Concern:

We are in receipt of your email dated May 2 2022, requesting a letter for the Westchester County Department of Health stating the following:

The Town of Yorktown Consolidated Water District can certify that there is adequate pressure and supply, ability and willingness to serve the above referenced subdivision located at Field Home on Catherine St. in the Town of Yorktown. It will be the developer's responsibility to make the appropriate connections to supply water into the development.

Attached please find a letter for the Department of Health stating the above.

If you have any questions or need any further information please feel free to contact the office.

Sincerely,



Paul Vasillo

Assistant Distribution Superintendent

**YORKTOWN CONSOLIDATED WATER DISTRICT**

1080 Spillway Road, Shrub Oak, NY 10588

Telephone: 914.245.6111

Fax: 914.245.8422

May 5, 2022

Mr. Delroy Taylor P.E.  
Assistant Commissioner  
Westchester County Health Department  
25 Moore Avenue  
Mt. Kisco, NY 10549

Re: Field Home Catherine St

Dear Mr. Taylor:

The Town of Yorktown Consolidated Water District can certify that there is adequate pressure and supply, ability and willingness to serve the above referenced subdivision located at Field Home on Catherine St. in the Town of Yorktown. It will be the developer's responsibility to make the appropriate connections to supply water into the development.

Sincerely,



Paul Vasillo  
Assistant Distribution Superintendent



**ATTACHMENT F**

**NEW YORK STATE DEPARTMENT OF  
ENVIRONMENTAL CONSERVATION DIVISION OF FISH  
AND WILDLIFE, NEW YORK NATURAL HERITAGE  
PROGRAM CORRESPONDENCE DECEMBER 8, 2022;**

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**WILDLIFE HABITAT ASSESSMENT FOR NEW YORK  
STATE OR FEDERALLY LISTED THREATENED OR  
ENDANGERED SPECIES AND SPECIES OF SPECIAL  
CONCERN – PREPARED BY ECOLOGICAL ANALYSIS,  
LLC, DATED JANUARY 22, 2024**

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Fish and Wildlife, New York Natural Heritage Program  
625 Broadway, Fifth Floor, Albany, NY 12233-4757  
P: (518) 402-8935 | F: (518) 402-8925  
www.dec.ny.gov

December 8, 2022

Anthony Russo  
Environmental Compliance Services  
35 Roosevelt Avenue  
Middletown, NY 10940

Re: Field Home - Active Adult Development  
County: Westchester Town/City: Yorktown

Dear Mr. Russo:

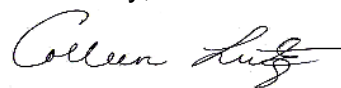
In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

We have no records of rare or state-listed animals or plants, or significant natural communities at the project site or in its immediate vicinity.

The absence of data does not necessarily mean that rare or state-listed species, significant natural communities, or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information that indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities, and other significant habitats maintained in the Natural Heritage database. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the NYS DEC Region 3 Office, Division of Environmental Permits, at [dep.r3@dec.ny.gov](mailto:dep.r3@dec.ny.gov).

Sincerely,



Colleen Lutz  
Assistant Biologist  
New York Natural Heritage Program

Wildlife Habitat Assessment for  
New York State or Federally Listed  
Threatened or Endangered Species  
And Species of Special Concern

Project:

Catherine Street Project

Town of Yorktown  
Westchester County, NY

Prepared By:  
James Bates

ECOLOGICAL ANALYSIS, LLC  
633 Route 211 East  
Suite 4 Box 4  
Middletown, New York 10941  
(845) 495-0123

January 22, 2024



633 Route 211 East • Suite 4, Box 4 • Middletown, NY 10941 • Phone: 845-495-0123  
• Fax: 866-688-0836 • [www.4ecological.com](http://www.4ecological.com)

## **Introduction**

The proposed residential development project site is located along Catherine Street and is approximately 50.51 acres within the Town of Yorktown, generally situated in a residential neighborhood setting. As part of this project's review requirements, Ecological Analysis, LLC, (EA) completed a wildlife habitat assessment of the property, which included observations of resident wildlife, as well as the potential for the site to support certain "target" species that are listed as "endangered", "threatened" or "species of special concern" by the New York State Department of Conservation (NYSDEC) and/or by the federal government's United States Fish and Wildlife Service (USFWS). A vegetation survey of the property was also initiated for the property. A list of the 84 taxa of vegetation observed during the site visits is attached as an appendix to this report.

The list of target species used throughout this report was additionally refined by querying both the New York State online EAFMAPPER website<sup>1</sup> of the NYSDEC and the USFWS IPaC<sup>2</sup> website. Copies of the NYSDEC ENV Map and EAF Mapper Map and of the USFWS IPaC report are provided in Appendices A and B of this report.

The EAFMAPPER return stated that the state agency has "no records of rare or state-listed animals or plants, or significant natural communities at the project site or in its immediate vicinity" and therefore no additional target species were considered as a result of our inquiries.

The online generated IPaC report stated that there are no critical habitats on or near the project area. The project area does overlap the known or expected range of any federally endangered species of wildlife, bog turtles, Indiana and Northern Long eared bats which are protected animals. The USFWS uses different radius in the reports. Where the NYSDEC database is considered to be more accurate and more site specific.

The subject site is located in the Town of Yorktown in central Westchester County, New York. The property is generally wooded, with a small urban upland woods on well drained soils on most of the property (Photos 1 and 2). A small stream with 2 attached wetlands are in the eastern portion of the parcel (Photo 3 & 4). Another small wetland is along the north eastern property boundary. This wetland is a small forest wetland fed by hillside runoff. The present fragmented nature of this site and other nearby off-site areas, influenced by both natural and anthropogenic factors, is reflective of the existing environment of central Westchester County, which includes many patches of second-growth forests that are on privately or publicly held lands, but interspersed within areas of urban development and extensive suburban and exurban neighborhoods.

Elevations above sea level across this relatively flat property range from approximately 540 feet near the southeastern area corner of the site near Catherine Street to approximately 416 feet near southwestern corner of the property at the stream out by the Aqueduct. The property is in the NYCDEP Croton watershed and contains the headwater watershed of a small, intermittent, unnamed tributary.

The site features four major habitat/ecosystem variants<sup>3</sup> that were observed and evaluated:

1. Uplands – Successional southern hardwoods;
2. Uplands – Maintained Lawn
3. Wetlands – Forested;
4. Stream corridors – Mid-reach streams and tributaries;

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<sup>1</sup> <https://gisservices.dec.ny.gov/eafmapper/>

<sup>2</sup> Information for Planning and Consultation (IPaC), an online project planning tool of the USFWS. <https://ecos.fws.gov/ipac/>

<sup>3</sup> Adapted from: Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. Ecological Communities of New York State. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY.

Of these four habitat classifications, the one that predominates across the property is the successional southern hardwood variant which is largely present as a red maple-birch –wood lot and the two manicured and cleared lawns. One being use as a multi-use play field and the other the lawn for the buildings.

As part of the proposed project, an inventory was completed in the fall of 2023 of the trees to be removed should the project move forward. The most common of the larger trees identified in the tree survey were red maples. Several other tree species that are typical of a successional southern hardwood forest were also noted, but in lesser numbers, including black gum, hickories, cherries, as well as exotic invasive species such as tree-of-heaven and Norway maple. These latter two highly adaptable and invasive species, in addition to the many honey locust that are prevalent across the site, are three exotic tree species that are readily capable of successfully outcompeting and overtaking other native species of trees in New York and the northeast.

On-site observations and assessments were conducted in the fall of 2021 and early January of 2024 by environmental scientists from EA. During the site walks EA employed a series of random, zig-zag transects with observations, listening, and/or ground searches being conducted as site specific features changed along the walking transect routes (e.g. through upland hardwood forests, to successional fields, and through the wetland).

The site visits were focused on observing wildlife habitat present on the property. The random nature of these transects allowed the investigator to observe and actively investigate landscape features of interest encountered. This tactic also allowed data to be collected from a greater variety of micro-habitats than would be encountered by more rigid transect procedures. During these transects, incidental observations of wildlife and vegetation were made and are noted in this report. A total of 84 taxa of vegetation were observed on site, and a list of this vegetation is provided in Appendix C of this report.

### ***Upland Communities***

The upland areas on the subject property range from second growth southern hardwood forest to areas to maintained lawns, with edge habitat between the forested area and the lawn areas. Within these bordering areas, a variety of herbaceous plants and grasses were noted. Photos 1 & 2 shown the typical views of the forested area.

Other plant species that were commonly observed across the two parcels, and that also are listed by the NYSDEC as either prohibited or regulated<sup>4</sup> included garlic mustard, Japanese honeysuckle, Norway maple, honey locust, privets, Japanese barberry, Goldenrod species, and oriental bittersweet.

The majority of the property is an upland forested community that is primarily dominated by garlic mustard, and brambles, as the groundstory vegetation, with multiflora rose, privet, and winged euonymus prominent in the brushy understory. In the overstory, black locust, Norway maple, red maple, sugar maple, and pignut hickory are variously dominant across the site.

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<sup>4</sup> In New York State, listed prohibited invasive species cannot be knowingly possessed with the intent to sell, import, purchase, transport or introduce or propagate. Regulated invasive species are species which cannot be knowingly introduced into a free-living state, or introduced by a means that one should have known would lead to such an introduction. Adapted from: 6 CRR-NY Part 575 Prohibited and Regulated Invasive Species.



PHOTO 1

Typical view, of  
interior forested  
area



PHOTO 2

Typical view, of  
interior forest with leaf  
off conditions



Underneath the dense and closed canopy of the upland area overstory trees, there is an open understory shrub and sapling layer over a sparse herbaceous ground layer of vegetation that is reflective of the low light intensities that reach the forest floor during most of the growing season (PHOTO 2). These strata were primarily comprised of saplings of the overstory trees, multiflora rose and privet bushes in the understory layer while garlic mustard and brambles were prevalent in the herbaceous ground layer. Regionally common mammals that would utilize this forested habitat would include whitetail deer, red fox, raccoon, striped skunk, porcupine, opossum, and many terrestrial or arboreal rodent species, including gray squirrel, Eastern chipmunk, shrews, voles, and various species of mice.

The Natural Heritage Program (NHP) of the NYSDEC publishes mapping resources that provide evaluations of the ecological condition of forested lands throughout the state for general planning purposes. The wooded lands on the project parcel and on most adjacent terrains are unrated by the NHP as forests. As shown on the figure, the site was not evaluated to include any core forest areas (shown on the Appendix D figure as areas of black cross-hatching). Core forests, where present, as they are on some of the nearby forested lands shown on the figure, contain sufficient undisturbed interior forest habitat to be of greater importance for those many species of wildlife and forest songbirds which typically avoid areas of human disturbance.



PHOTO 3

Typical view, of  
stream



### ***Wetland Community***

The tree onsite wetlands are mostly wooded wetland the largest of the three has a significant portion of the wetland that is dominated by phragmites. This can be seen in Photo 4. Two of the wetlands are directly connected to the stream that flow through the eastern portion of the property. Except for the Phragmites in the one area the dominant vegetation in the wetland areas consists of tearthumb. The overstory tree canopy was dominated by red maple and Norway maple. This stream exits the property to the northeast and is a minor tributary to the Croton watershed, which ultimately discharges into the Croton Reservoir system. Both the site wetland and the stream are subject to protections afforded to them by the Town of Yorktown's 100' wetland/watercourse adjacent area regulations. There is also a small wooded wetland along the northeastern property line this drains through an ephemeral stream that flow to a swale along the NYC Aqueduct. This wetland is also subject to protections afforded to them by the Town of Yorktown's 100' wetland/watercourse adjacent area regulations

There was no wildlife observed in or around the wetland during our two site visits, however any site fauna may utilize these areas in transit and smaller, omnivorous, mammals such as raccoons and skunks would forage within and around the wetland, consuming smaller vertebrate and invertebrate aquatic prey species when seasonally present.

PHOTO 4

Typical view of vegetation in the wetland area of the site's streambed.



#### ***Wildlife Use of the Site***

The site provides several different types of habitats for use by wildlife species. The wooded upland has some mature trees of species that would provide acorns and hickory nuts (mast) in addition to some shrubs that would produce various berries, fruits, twigs, and winter buds for wildlife browsing. Dead wood, including fallen trunks and limbs and decaying stumps, was observed throughout the site, providing shelter for smaller animals and producing invertebrate food sources for many predatory species of mammals, reptiles, amphibians, and birds.

In the context of the parcel's overall landscape and that of adjacent land usages, a number of bird species, which require either open meadow or closed canopy woodlands to thrive, are likely to use this site, either as a stopover during seasonal migrations or for feeding or nesting activities. Such species might include: vireos, ovenbirds, thrushes, and woodpeckers as well as some of the owl species and some of the migratory warblers. While these species are not specifically state protected, they are of concern as areas of woodlands are cleared for development. The presence of other small wooded areas and undeveloped parcels within several miles in all directions within numerous regional preserves, parklands and undeveloped portions of other parcels presents similar habitat that may be used by these species if displaced either temporarily or permanently from the site of this proposed development.

#### **Potential for Use by Threatened or Endangered Species or Species of Special Concern**

The site was examined for potential use by a number of threatened or endangered species which are given statutory protection by Section 182.2g of 6 NYCRR Part 182. Based strictly on the characteristics of the property including its wetland areas, habitat potential was analyzed for the following species that are either New York State threatened or endangered:

- Bog turtle - Endangered
- Mud turtle - Endangered
- Tiger salamander - Endangered



- Northern cricket frog – Endangered
- Indiana bat – Endangered
- Northern long-eared bat – Threatened
- Northern fence lizard - Threatened
- Timber rattlesnake – Threatened

Habitat potential was also evaluated for the following species of special concern, a category of protected animals that is also listed by 6 NYCRR Part 182:

- Eastern box turtle
- Wood turtle
- Spotted turtle
- Eastern hognose snake
- Worm snake
- Mole salamanders:
  - Marbled salamander
  - Blue spotted salamander
  - Jefferson salamander

Several of the species from these listings of protected animals were eliminated from consideration due to the lack of known populations within the range of central Westchester County generally, including:

- Bog turtle –lack of suitable habitat and the lack of know population in the direct area.
- Mud turtle - north of its known range of Long Island, lack of open field areas, lack of suitable open water.
- Tiger salamander - north of its known range, confined to eastern Long Island.
- Northern cricket frog - requires sunlit pond habitat, within New York State known only in the Hudson Highlands and areas of Orange, Ulster, and Dutchess Counties. There are no known populations in Westchester County.
- Indiana bat – the NYSDEC NHP does not list any critical habitat or any known populations at or near this site.
- Northern long-eared bat – the NYSDEC NHP does not list any critical habitat or any known populations at or near this site.
- Northern fence lizard and timber rattlesnake – While both have populations in the Hudson Highlands to the north of Westchester County (and the fence lizard has a known population to the east, bordering Connecticut), these two species have specific requirements for exposed rock and ledge terrain for denning and basking that are not present on this site.
- Worm snake – requires moist woody areas with sandy substrate. Known from the Peekskill area in upper Westchester County and from Long Island.

Habitat conditions available on the site (forested uplands, meadows, and a small, intermittently flooded wetland) were then considered, and several further of these species were eliminated from consideration.

- Spotted turtle - the habitat for the spotted turtle is flooded wetlands, ponded areas and adjacent wooded areas. The requirement for flooded, ponded areas is not met by this site.
- Mole salamanders - Mole salamanders include the three species listed: marbled salamanders, blue-spotted salamanders, and Jefferson salamanders. While the blue-spotted and Jefferson salamanders are known to have populations in areas of northern Westchester County, only the marbled salamander has populations generally located throughout the county. All of the mole salamanders are terrestrial as adults and spend most of their lifespan utilizing inground burrows within upland, wooded areas. But they do require the isolated features of vernal pool wetlands for breeding purposes and none of the wetlands on the project properties areas or a vernal pool habitat that could be exploited for the successful breeding of any of these species.

Of the remaining species from the above listings, each of their range and habitat requirements may be met in part within portions of the proposed project site. Each of these species and their general habitat requirements are listed in the following table and then discussed individually below.

<b><i>General habitat requirements for state listed "Species of Special Concern" potentially present on the Field Home properties</i></b>		
<b>Common Name</b>	<b>Scientific Name</b>	<b>Habitat requirements met on the SCS property</b>
Eastern box turtle	<i>Terrapene carolina</i>	Upland woods, wooded wetland corridors
Wood turtle	<i>Glyptemys insculpta</i>	Upland woods, wooded wetland corridors
Eastern hognose snake	<i>Heterodon platyrhinos</i>	Wooded areas with stone walls or rocky surface

### ***Eastern Box Turtle and Wood Turtle***

Based on site reconnaissance, there are wooded areas of the property that may be used by both the Eastern box turtle and the wood turtle. These two species are listed by New York State as species of special concern.

These are primarily terrestrial turtles, although, if present here, they may make seasonal offsite movements to any nearby stream beds or shallow ponds that could serve as refugia for them during the hotter months of summer. The major threats to terrestrial turtles appear to be pesticide poisoning, collection as pets and natural predation in areas where predators such as raccoons may be increasing.

On this property, these turtles would potentially utilize any of the wooded areas on the parcel, including both upland and wetland habitats.

### ***Eastern Hognose Snake***

There is the possibility that habitat on-site could support the Eastern hognose snake. This species is listed by NYSDEC as being a species of special concern, although it has also described as being locally common at scattered discrete locations throughout its known range. It is a highly secretive species that may utilize the stone walls and wooded areas of the site for cover and feeding. Since this species is also adaptable to many features of suburban areas, the proposed development of the property should not result in a significant adverse impact to the hognose snake, if in fact it is present on this site. No hognose snakes were observed on the site during any of EA's site visits.

### ***Potential Impacts to "Species of Special Concern"***

Following the use of the range and habitat assessments discussed above to eliminate many of the target species from further consideration, the currently proposed development plan was reviewed to determine what if any impact the proposed structures and other site plan features may have on the local populations of the three listed species remaining under consideration. The potentially impacted "species of special concern" identified above include the following three species, that if present at all, are likely to utilize the upland or wetland portions of this site during at least some portion of their life phases:

The Eastern box turtle and the wood turtle both make extensive overland movements for foraging and, if present, individuals may use any portion of this property. While construction at any time on a portion of the site may temporarily alter some patterns of movement, there will be some bordering areas of undisturbed land for turtle foraging movements to occur. The temporary disturbance of portions of the site at any time could potentially impact individuals in the development area, but is unlikely to impact the population as a whole. Long term impacts are not expected unless home owners proceed to capture and collect individuals.

The hognose snake is known to be adaptable to new developments in rural and suburban areas. Thus, the proposed development should not result in a significant adverse impact to the hognose snake population, if in fact the species has a presence on this site.

### **Conclusions**

There were no protected wildlife species identified for this location by New York State. The USFWS identifies 3 species, only that they are in the area. 2 bat species and bog turtles. There is no habitat for bog turtles and NYSDEC databases are better than the USFWS as they have more staff reviewing projects and sites. Our findings concur with the NYSDEC that there no Threatened and or Endangered species on the property.

As stated earlier, it can be expected that a temporary displacement of most wildlife species on the property might occur during the proposed near full redevelopment of this property, and permanent displacement of any larger species of wildlife would occur inside the area of the erected fence line. While the entire property is of a size that would not be expected to sustain populations of any species of larger wildlife such as deer, coyote, or foxes, it does provide greater habitat value to a variety of mid-sized and smaller wildlife, such as racoons, skunks, rodents, and insectivores, and their continuing usage of the site would be promoted by the provision of a 6" gap at the base of the surrounding security fence. The remaining areas of unimpacted habitat outside of the limits of disturbance, including the wetland and stream habitats on the property and their town regulated 100' adjacent areas, will remain as wooded areas of the property and will continue to provide some habitat value for these smaller species of wildlife. Therefore, it is our professional opinion that the proposed development plan would not adversely affect any area-wide wildlife populations.

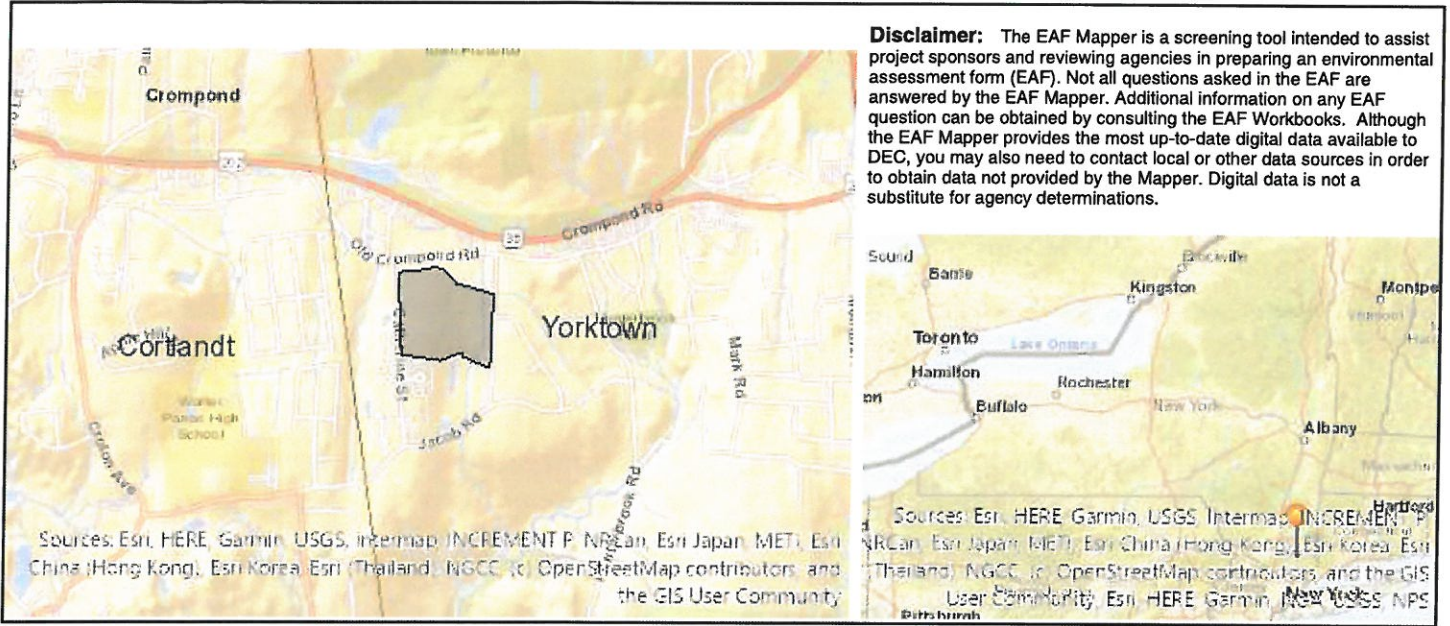
### Appendices:

- APPENDIX A –NYSDEC ENV Mapper Map and EAF mapper Map
- APPENDIX B – USFWS IPaC resource list, generated online on January 17, 2024
- APPENDIX C – List of observed vegetation, May and October, 2021 and January 2024
- APPENDIX D – Areawide mapped forest resources

Appendix A

NYSDEC Maps





B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYC Watershed Boundary
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.ii [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	No
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	No
E.2.j. [100 Year Floodplain]	No
E.2.k. [500 Year Floodplain]	No
E.2.l. [Aquifers]	No
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No

E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National or State Register of Historic Places or State Eligible Sites]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	No
E.3.i. [Designated River Corridor]	No



# Catherine Street NYSDEC ENV Map



January 17, 2024

1:4,514



Westchester County GIS, Esri, HERE, Garmin, IPC, New York State, Maxar

NYS Department of Environmental Conservation  
Not a legal document

Appendix B

USFWS IPaC resource list



# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Westchester County, New York



## Local offices

Long Island Ecological Services Field Office

☎ (631) 286-0485

📠 (631) 286-4003

340 Smith Road  
Shirley, NY 11967-2258

New York Ecological Services Field Office

☎ (607) 753-9334

📠 (607) 753-9699

✉ [fw5es\\_nyfo@fws.gov](mailto:fw5es_nyfo@fws.gov)

3817 Luker Road  
Cortland, NY 13045-9385

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).



2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
Indiana Bat <i>Myotis sodalis</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/5949">https://ecos.fws.gov/ecp/species/5949</a>	Endangered
Northern Long-eared Bat <i>Myotis septentrionalis</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9045">https://ecos.fws.gov/ecp/species/9045</a>	Endangered

## Reptiles

NAME	STATUS
Bog Turtle <i>Glyptemys muhlenbergii</i> No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/6962">https://ecos.fws.gov/ecp/species/6962</a>	Threatened

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	Candidate

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

## Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act<sup>1</sup> and the Migratory Bird Treaty Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats<sup>3</sup>, should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

**There are bald and/or golden eagles in your project area.**

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON

Bald Eagle *Haliaeetus leucocephalus*

Breeds Sep 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.



# Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.



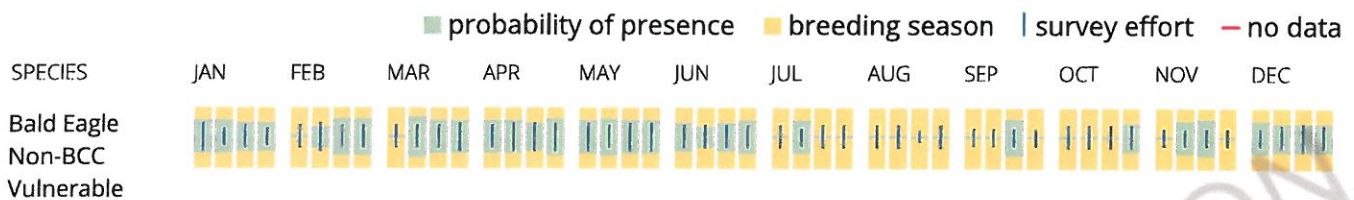
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (-)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



### What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern \(BCC\)](#) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON



<b>Bald Eagle</b> <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.	Breeds Sep 1 to Aug 31
<b>Black-billed Cuckoo</b> <i>Coccyzus erythrophthalmus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9399">https://ecos.fws.gov/ecp/species/9399</a>	Breeds May 15 to Oct 10
<b>Black-capped Chickadee</b> <i>Poecile atricapillus praticus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Jul 31
<b>Canada Warbler</b> <i>Cardellina canadensis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Aug 10
<b>Chimney Swift</b> <i>Chaetura pelagica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Mar 15 to Aug 25
<b>Prairie Warbler</b> <i>Dendroica discolor</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31
<b>Rusty Blackbird</b> <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
<b>Wood Thrush</b> <i>Hylocichla mustelina</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Aug 31

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

## Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

## Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

## Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

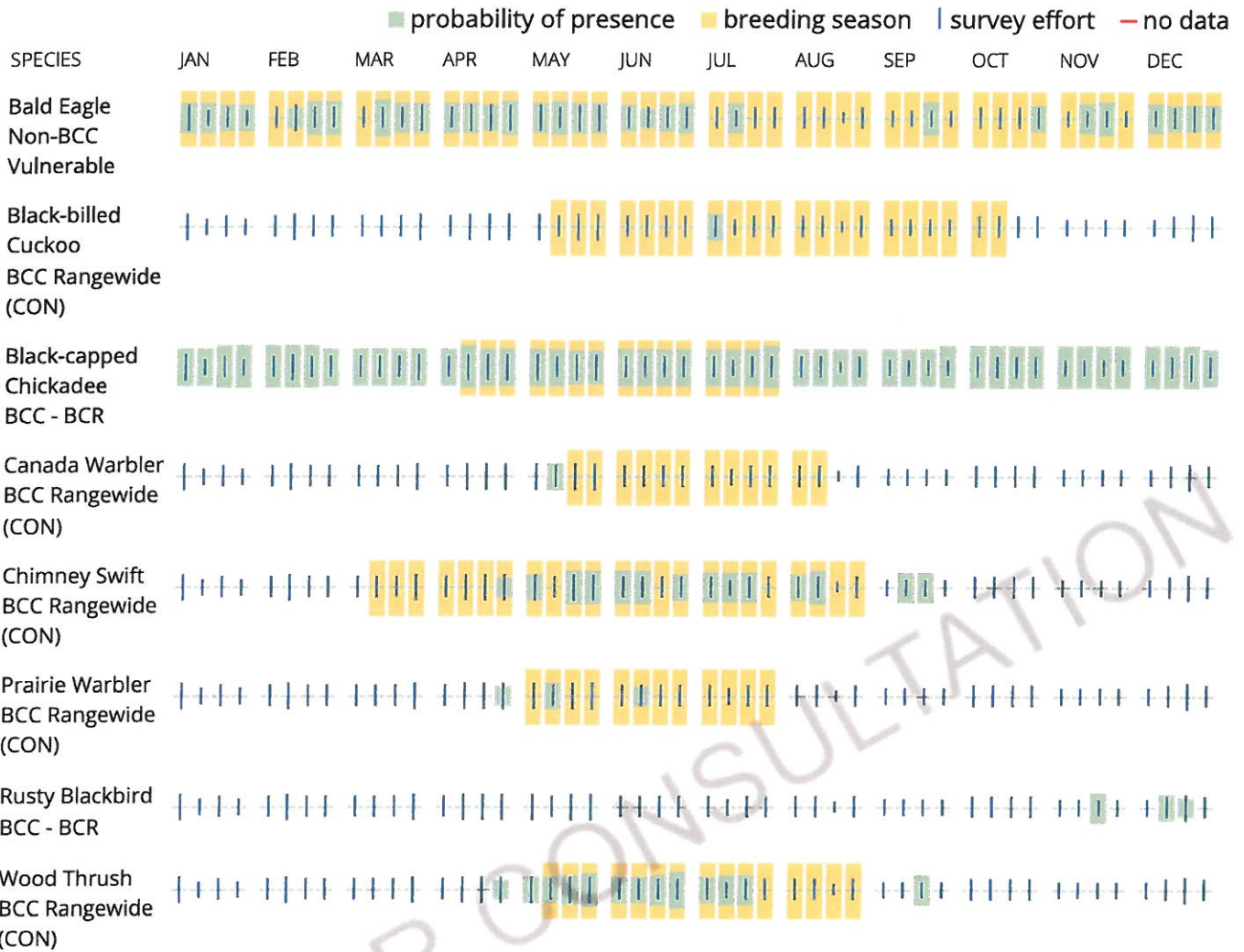
## No Data (—)

A week is marked as having no data if there were no survey events for that week.

## Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the [Probability of Presence Summary](#). [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid



cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

### **What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to

you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### **National Wildlife Refuge lands**

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.



# Fish hatcheries

There are no fish hatcheries at this location.

## Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER FORESTED/SHRUB WETLAND

[PFO1A](#)

RIVERINE

[R5UBH](#)

[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

### Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

#### **Data exclusions**

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Appendix C

List of observed vegetation, May and October, 2021 and January 2024



**List of vegetation observed across the Fields Home properties**

<b>List of vegetation observed on the Fieldhome at Catherine Street site</b>	
<b>COMMON NAME*</b>	<b>SCIENTIFIC NAME*</b>
Japanese maple	<i>Acer palmatum</i>
Norway maple	<i>Acer platanoides</i>
Sycamore maple	<i>Acer pseudoplatanus</i>
Tree-of-Heaven	<i>Ailanthus altissima</i>
Garlic mustard	<i>Alliaria petiolata</i>
Wild leek	<i>Allium tricoccum</i>
Field garlic	<i>Allium vineale</i>
Indian hemp	<i>Apocynum cannabinum</i>
Devil's walkingstick	<i>Aralia spinosa</i>
Common wormwood	<i>Artemisia vulgaris</i>
Common milkweed	<i>Asclepias syriaca</i>
Japanese barberry	<i>Berberis thunbergii</i>
Yellow birch	<i>Betula alleghaniensis</i>
Sweet birch	<i>Betula lenta</i>
Devil's beggarticks	<i>Bidens frondosa</i>
Pignut hickory	<i>Carya glabra</i>
Shagbark hickory	<i>Carya ovata</i>
Mockernut hickory	<i>Carya tomentosa</i>
Northern catalpa	<i>Catalpa speciosa</i>
Oriental bittersweet	<i>Celastrus orbiculatus</i>
Wild basil	<i>Clinopodium vulgare</i>
Flowering dogwood	<i>Cornus florida</i>
Japanese cedar	<i>Cryptomeria japonica</i>
Queen Anne's lace	<i>Daucus carota</i>
Evergreen wood fern	<i>Dryopteris intermedia</i>
Autumn olive	<i>Elaeagnus umbellata</i>
Pilewort	<i>Erechtites hieraciifolia</i>
Winged euonymus	<i>Euonymus alata</i>
White ash	<i>Fraxinus americana</i>
Bedstraw	<i>Galium spp.</i>
White avens	<i>Geum canadense</i>
Honey locust	<i>Gleditsia triacanthos</i>
Melic mannagrass	<i>Glyceria melicaria</i>
Witchhazel	<i>Hamamelis virginiana</i>

**List of vegetation observed  
on the Fieldhome at Catherine Street site**

Jewelweed	<i>Impatiens capensis</i>
Black walnut	<i>Juglans nigra</i>
Eastern red cedar	<i>Juniperus virginiana</i>
Privet	<i>Ligustrum</i> spp.
Butter-and-eggs	<i>Linaria vulgaris</i>
Spicebush	<i>Lindera benzoin</i>
Tulip poplar	<i>Liriodendron tulipifera</i>
Indian tobacco	<i>Lobelia inflata</i>
Japanese honeysuckle	<i>Lonicera japonica</i>
Bush honeysuckle	<i>Lonicera</i> spp.
Crabapple	<i>Malus</i> spp.
Nepalese browntop	<i>Microstegium vimineum</i>
Chinese silvergrass	<i>Miscanthus sinensis</i>
Black gum	<i>Nyssa sylvatica</i>
Sensitive fern	<i>Onoclea sensibilis</i>
Interrupted fern	<i>Osmunda claytoniana</i>
Cinnamon fern	<i>Osmundastrum cinnamomeum</i>
Eastern hop hornbeam	<i>Ostrya virginiana</i>
Princess tree	<i>Paulownia tomentosa</i>
Common reed	<i>Phragmites australis</i>
Sycamore	<i>Platanus occidentalis</i>
Japanese knotweed	<i>Polygonum cuspidatum</i>
Arrowleaf tearthumb	<i>Polygonum sagittatum</i>
Jumpseed	<i>Polygonum virginianum</i>
Christmas fern	<i>Polystichum acrostichoides</i>
Eastern cottonwood	<i>Populus deltoides</i>
Big tooth aspen	<i>Populus grandidentata</i>
Selfheal	<i>Prunella vulgaris</i>
Black cherry	<i>Prunus serotina</i>
White oak	<i>Quercus alba</i>
Swamp white oak	<i>Quercus bicolor</i>
Scarlet oak	<i>Quercus coccinea</i>
Scarlet oak	<i>Quercus cocinia</i>
Red oak	<i>Quercus rubra</i>
Black oak	<i>Quercus velutina</i>
Black locust	<i>Robinia pseudoacacia</i>
Multiflora rose	<i>Rosa multiflora</i>
Allegheny blackberry	<i>Rubus allegheniensis</i>

**List of vegetation observed  
on the Fieldhome at Catherine Street site**

American red raspberry	Rubus idaeus
Wineberry	Rubus phoenicolasius
Brambles	Rubus spp.
Curly dock	Rumex crispus
Bitter dock	Rumex obtusifolius
Sassafras	Sassafras albidum
Foxtail grass	Setaria spp.
Goldenrods	Solidago spp.
Common dandelion	Taraxacum officinale
Eastern poison ivy	Toxicodendron radicans
American elm	Ulmus americana
Common gypsyweed	Veronica officinalis

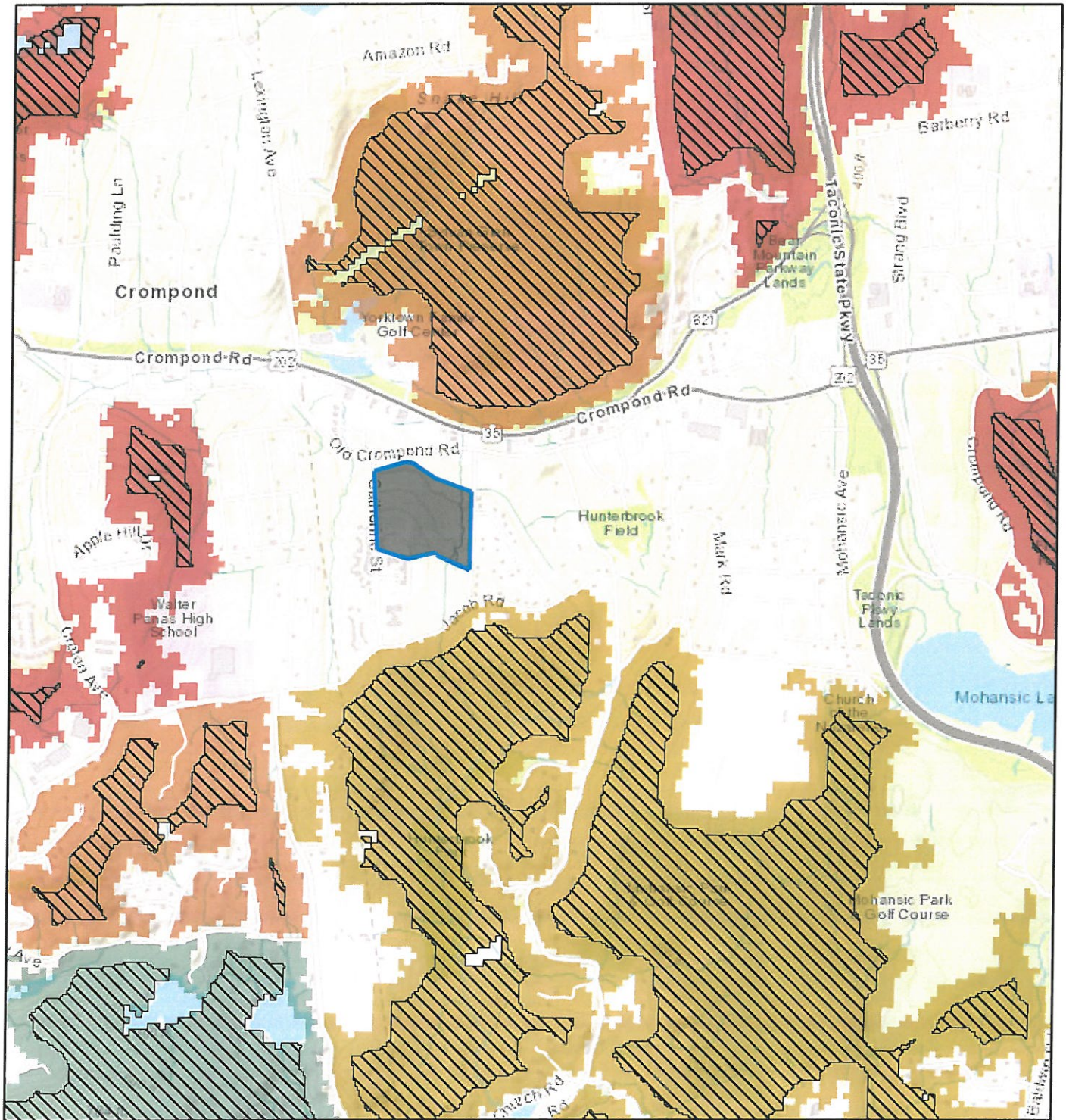
This list represents species that were observed during site visits on our May and October 2021; and January 17, 2024. It is not, however, represented to be an exhaustive list of all plants that would be present on this site.

\*Scientific and common names of plants taken from USDA PLANTS online database:  
<https://plants.sc.egov.usda.gov/home>

Appendix D  
Areawide mapped forest resources

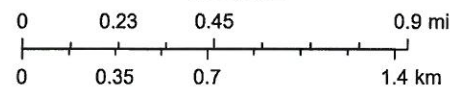


# Field Home - Catherine Street



January 18, 2024

1:36,112





County of Westchester, Esri, HERE, Garmin, INCREMENT P, USGS, METI/  
NASA, EPA, USDA


Author: NYSDEC Hudson Valley Natural Resource Mapper  
Not a legal document




Forest Condition Index (Percentile)

 99-100 - Top 1%


 95-99 - Top 5%

 90-95 - Top 10%

 80-90 - Top 20%

 60-80

 40-60


 20-40

 0-20

 Core Forests

Forest Linkage Zones

 Linkage Zone

 Zone continues beyond study area

 Matrix Forest Blocks

**ATTACHMENT G**

**“2300 CATHERINE STREET,**

**TREE INVENTORY DATA, 2023”**

**PREPARED BY BARTLETT TREE EXPERTS**



# 2300 Catherine Street Tree Inventory Data | 2023

**Prepared For:**

Toll Brothers  
2300 Catherine Street  
Yorktown, NY

**Prepared By:**

**Keith Bimbi, Field Consulting Arborist**

ISA Certified Arborist #NJ-0891A, ISA Tree Risk Assessment Qualified, Certified  
Treecare Safety Professional #1667, NJ Licensed Tree Expert #594

**Provided By:**

**Trevor Hall, Arborist Representative**

ISA Certified Arborist, ISA Tree Risk Assessment Qualified, Certified Treecare Safety  
Professional, NY State Arborist Board South East Region Governor, New York State  
Arborists Association Past President



**BARTLETT  
TREE EXPERTS**

*SCIENTIFIC TREE CARE SINCE 1907*

**Bartlett Tree Experts**  
2240 Saw Mill River Road  
Elmsford, New York 10523  
(914) 592-4520  
[www.bartlett.com](http://www.bartlett.com)

In August 2023, Toll Brothers retained Bartlett Tree Experts to perform an inventory of trees on Toll Brothers's site at 2300 Catherine Street in Yorktown. Team members Keith Bimbi, and Andrew Mink visited the site on August 3-23 to conduct the inventory.

The inventory included:

- identifying trees and installing brass tags with ID number (Tree ID numbers ranging from 1 to 2,268);
- identifying the trees' species, condition class, age class, and DBH;
- mapping the trees using GPSr hardware and Geographic Information System (GIS) software, and Bartlett Tree Experts' ArborScope™ web-based management system

**Specifications/Definitions**

**Age Class**

<b>New Planting</b>	Tree not yet established
<b>Young</b>	Established tree but not in the landscape for many years
<b>Semi-mature</b>	Established tree but has not yet reached full growth potential
<b>Mature</b>	Tree within its full growth potential
<b>Over-mature</b>	Tree that is declining or beginning to decline due to its age

**Height Class**

<b>Small</b>	Less than 15 feet
<b>Medium</b>	15 to 40 feet
<b>Large</b>	Greater than 40 feet

**Condition Class**

<b>Dead</b>	
<b>Poor</b>	Most of the canopy displays dieback and undesirable leaf color, inappropriate leaf size or inadequate new growth. Tree or parts of tree are in the process of failure.
<b>Fair</b>	Parts of canopy display undesirable leaf color, inappropriate leaf size, and inadequate new growth. Parts of the tree are likely to fail.
<b>Good</b>	Tree health and condition are acceptable.

**Suitability for Preservation**

Before evaluating the impacts that will occur during development, it is important to consider the quality of the tree resource itself, and the potential for individual trees to function well over an extended length of time. Trees that are preserved on development sites must be carefully selected to make sure that they may survive development impacts, adapt to a new environment and perform well in the landscape.

Our goal is to identify trees that have the potential for long-term health, structural stability, and longevity. For trees growing in open fields, away from areas where people and property are present, structural defects and/or poor health presents a low risk of damage or injury if they fail. However, we must be concerned about safety in use areas. Therefore, where development encroaches into existing plantings, we must consider their structural stability as well as their potential to grow and thrive in a new environment. Where development will not occur, the normal life cycles of decline, structural failure and death should be allowed to continue.

Evaluation of suitability for preservation considers several factors:



**• Tree Health**

Healthy, vigorous trees are better able to tolerate impacts such as root injury, demolition of existing structures, changes in soil grade and moisture, and soil compaction than are non-vigorous trees.

**•Structural Integrity**

Trees with significant amounts of wood decay and other structural defects that cannot be corrected are likely to fail. Such trees should not be preserved in areas where damage to people or property is likely.

**•Species Response**

There is a wide variation in the response of individual species to construction impacts and changes in the environment.

**•Tree Age and Longevity**

Old trees, while having significant emotional and aesthetic appeal, have limited physiological capacity to adjust to an altered environment. Young trees are better able to generate new tissue and respond to change.

**•Species Invasiveness**

Species that spread across a site and displace desired vegetation are not always appropriate for retention. This is particularly true when indigenous species are displaced.

Each tree was rated for suitability for preservation based upon its age, health, structural condition, and ability to safely coexist within a development environment. We consider trees with high suitability for preservation to be the best candidates for preservation. We do not recommend retention of trees with low suitability for preservation in areas where people or property will be present. Retention of trees with moderate suitability for preservation depends upon the intensity of proposed site changes.

- High**            These are trees with good health and structural stability that have the potential for longevity at the site.
- Moderate**    Trees in this category have fair health and/or structural defects that may be abated with treatment. These trees require more intense management and monitoring and may have shorter lifespans than those in the “high” category.
- Low**             Trees in this category are in poor health or have significant defects in structure that cannot be abated with treatment. These trees can be expected to decline regardless of management. The species or individual

tree may possess either characteristics that are undesirable in landscape settings or be unsuited for use areas.

Attached is a table of all tree data, entitled Toll Brothers Tree Data – August 2023. Additionally, all tree locations, have been uploaded to Arborscope.

Our inventory revealed 2268 trees assessed included 38 species of trees, as detailed in the following table:

### Tree Species Identified

Genus	Species	Common Name	Count	% Distribution Total
<b>Acer</b>	<i>palmatum</i>	Maple-Japanese	1	< 1%
	<i>platanoides</i>	Maple-Norway	6	< 1%
	<i>pseudoplatanus</i>	Maple-Sycamore	2	< 1%
	<i>rubrum</i>	Maple-Red	1032	46%
	<i>saccharum</i>	Maple-Sugar	98	4%
<b>Acer Total</b>			<b>1139</b>	<b>50%</b>
<b>Ailanthus</b>	<i>altissima</i>	Tree of Heaven	43	2%
<b>Aralia</b>	<i>spinosa</i>	Devils Walkingstick	1	< 1%
<b>Betula</b>	<i>alleghaniensis</i>	Birch-Yellow	3	< 1%
	<i>lenta</i>	Birch-Sweet	294	13%
<b>Betula Total</b>			<b>297</b>	<b>13%</b>
<b>Carya</b>	<i>glabra</i>	Hickory-Pignut	52	2%
	<i>ovata</i>	Hickory-Shagbark	12	1%
	<i>tomentosa</i>	Hickory-Mockernut	6	< 1%
<b>Carya Total</b>			<b>70</b>	<b>3%</b>
<b>Catalpa</b>	<i>speciosa</i>	Catalpa-Northern	1	< 1%
<b>Cornus</b>	<i>florida</i>	Dogwood-Flowering	2	< 1%
<b>Cryptomeria</b>	<i>japonica</i>	Japanese Cryptomeria	2	< 1%
<b>Fagus</b>	<i>grandifolia</i>	Beech-American	184	8%
<b>Fraxinus</b>	<i>americana</i>	Ash-White	28	1%
<b>Gleditsia</b>	<i>triacanthos</i>	Honeylocust- Common	1	< 1%
<b>Juglans</b>	<i>nigra</i>	Walnut-Black	18	1%
<b>Juniperus</b>	<i>virginiana</i>	Juniper-Eastern Redcedar	1	< 1%
<b>Liriodendron</b>	<i>tulipifera</i>	Tuliptree	183	8%
<b>Malus</b>	sp.	Crabapple	7	< 1%
<b>Nyssa</b>	<i>sylvatica</i>	Tupelo-Black	11	< 1%
<b>Ostrya</b>	<i>virginiana</i>	Hophornbeam-American	1	< 1%
<b>Paulownia</b>	<i>tomentosa</i>	Royal Paulownia Princess Tree	5	< 1%
<b>Platanus</b>	<i>occidentalis</i>	Sycamore-American	9	< 1%
<b>Populus</b>	<i>deltoides</i>	Poplar-Eastern	3	< 1%
	<i>grandidentata</i>	Poplar-Bigtooth Aspen	1	< 1%
<b>Populus Total</b>			<b>4</b>	<b>&lt; 1%</b>
<b>Prunus</b>	<i>serotina</i>	Cherry-Black	33	1%
<b>Quercus</b>	<i>alba</i>	Oak-White	21	1%
	<i>bicolor</i>	Oak-Swamp White	4	< 1%
	<i>coccinea</i>	Oak-Scarlet	18	1%

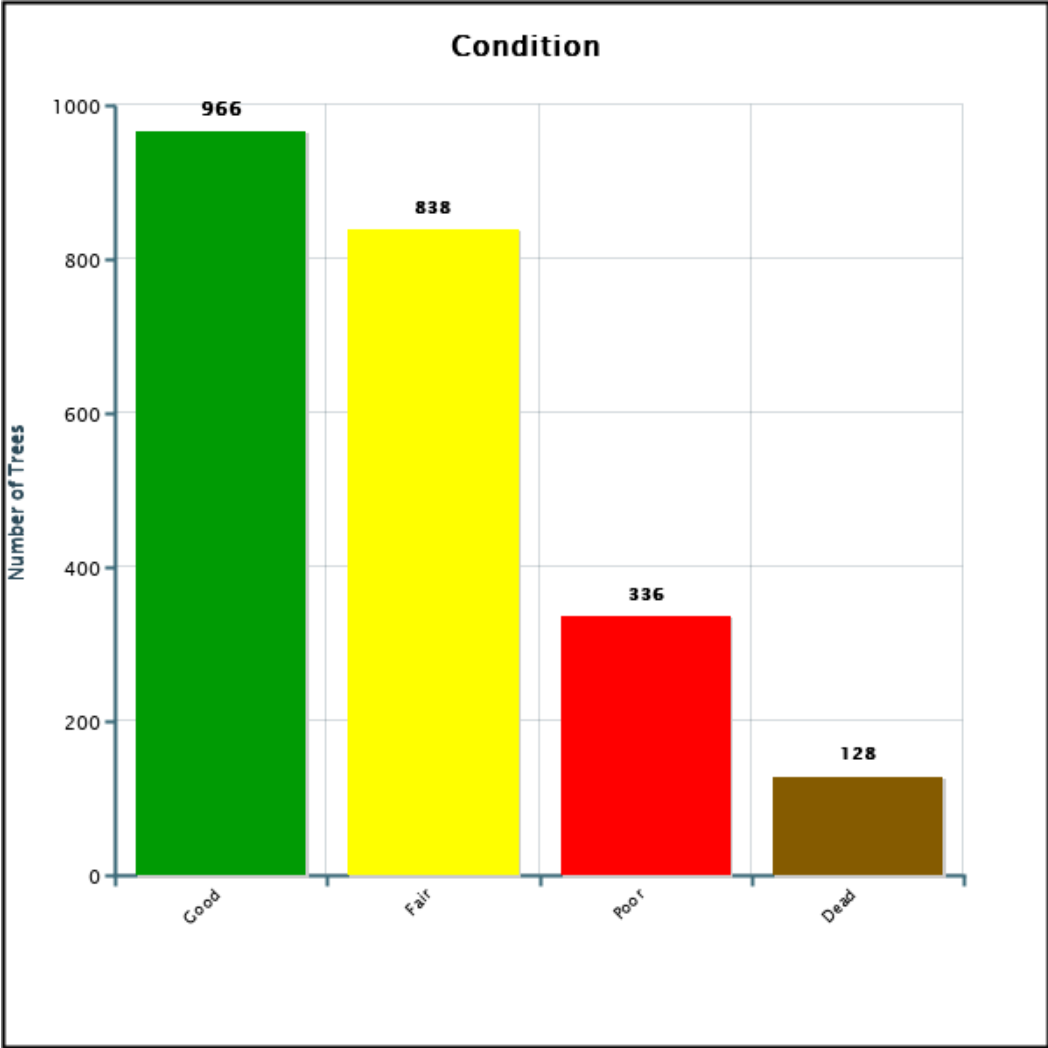
Genus	Species	Common Name	Count	% Distribution Total
	<i>rubra</i>	Oak-Northern Red	33	1%
	<i>velutina</i>	Oak-Black	51	2%
<b>Quercus Total</b>			<b>127</b>	<b>6%</b>
<b>Robinia</b>	<i>pseudoacacia</i>	Locust-Black	45	2%
<b>Sassafras</b>	<i>albidum</i>	Sassafras-Common	44	2%
<b>Tsuga</b>	<i>canadensis</i>	Hemlock-Canadian	1	< 1%
<b>Ulmus</b>	<i>americana</i>	Elm-American	11	< 1%
<b>Grand Total</b>			<b>2268</b>	<b>100%</b>

### Condition Class

Most of the trees were in good to fair condition, but some dead trees or trees in poor condition were assessed. The breakdown of tree condition follows:

**CONDITION CLASS BREAKDOWN**

Condition Class	Quantity	% of Total
Good	966	43%
Fair	838	37%
Poor	336	15%
Dead	128	6%

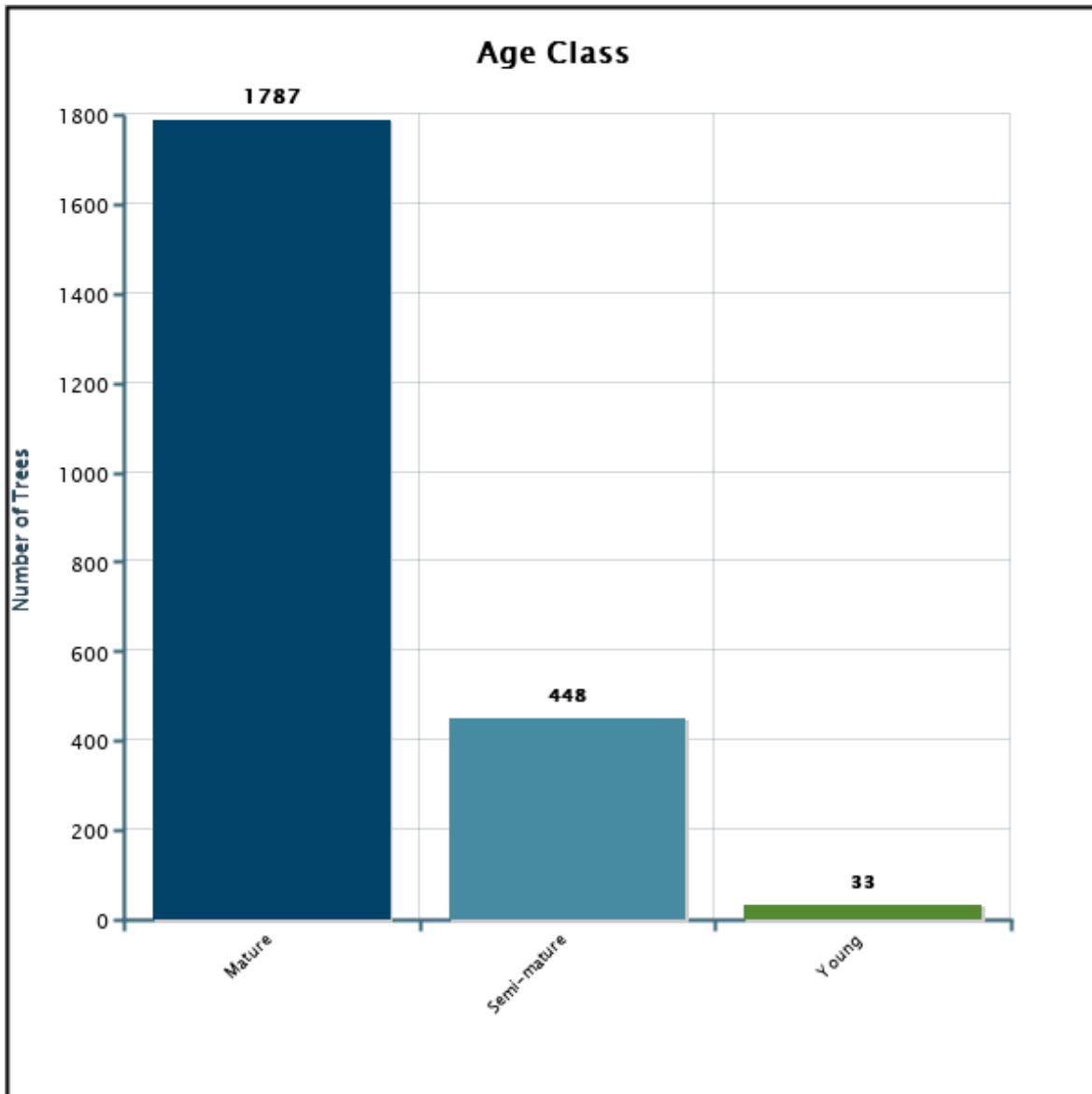




### Age Class

The breakdown of tree age class follows:

Age Class	Quantity	% of Total
<b>Mature</b>	1787	79%
<b>Semi-mature</b>	448	20%
<b>Young</b>	33	1%

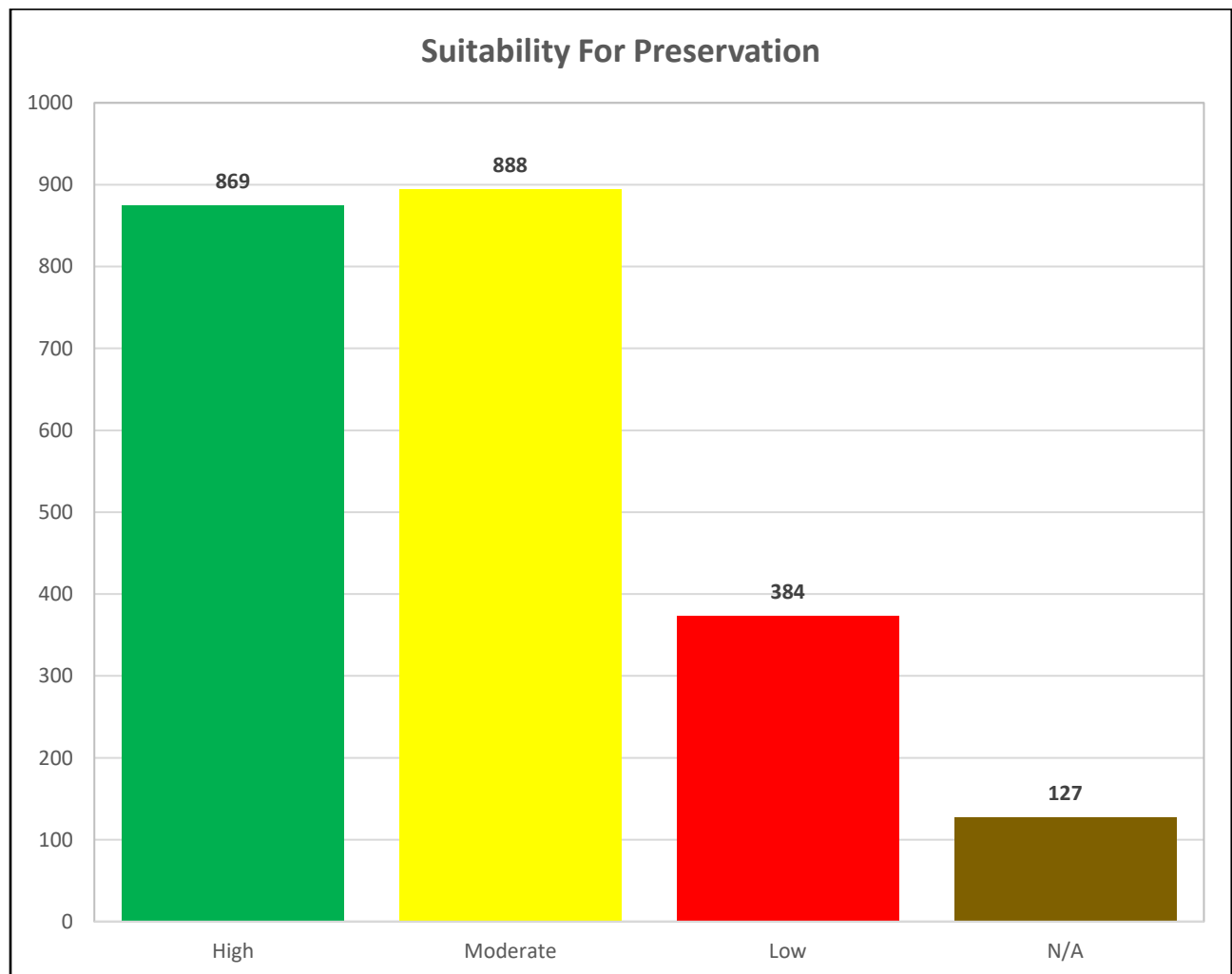


### Suitability for Preservation

The breakdown of suitability for preservation follows:

#### SUITABILITY FOR PRESERVATION BREAKDOWN

Suitability for Preservation	Quantity	% of Total
High	869	38%
Moderate	888	39%
Poor	384	17%
N/A	127	6%



## ENTIRE INVENTORY (2268 Trees)

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1	Acer pseudoplatanus	34	Mature	34	Poor	Large	Low	20
2	Acer platanoides	20.62	Mature	16, 13	Poor	Medium	Low	10
3	Cornus florida	18.75	Mature	15	Fair	Small	Moderate	15
4	Cornus florida	25	Mature	20	Good	Small	High	15
5	Cryptomeria japonica	17	Mature	17	Good	Large	High	15
6	Cryptomeria japonica	16	Mature	16	Fair	Large	Moderate	15
7	Catalpa speciosa	15.33	Mature	23	Good	Large	High	20
8	Acer pseudoplatanus	25	Mature	25	Fair	Large	Moderate	20
9	Gleditsia triacanthos	22.67	Mature	34	Good	Large	High	25
10	Quercus alba	19	Mature	19	Good	Large	High	30
11	Acer rubrum	9.33	Mature	14	Good	Large	High	25
12	Betula lenta	N/A	Mature	13	Dead	Large	N/A	20
13	Betula lenta	12	Mature	12	Poor	Large	Low	20
14	Betula lenta	17	Mature	17	Good	Large	Moderate	25
15	Betula lenta	13	Mature	13	Fair	Large	Moderate	25
16	Betula lenta	13	Mature	13	Fair	Large	Moderate	25
17	Acer rubrum	10.67	Mature	16	Good	Large	High	25
18	Acer rubrum	7.33	Mature	11	Good	Large	High	15
19	Populus grandidentata	20	Mature	16	Good	Large	High	25
20	Acer rubrum	9.33	Mature	14	Good	Large	High	20
21	Liriodendron tulipifera	33.66	Mature	14, 23	Good	Large	Low	25
22	Liriodendron tulipifera	16.25	Mature	13	Good	Large	Low	20
23	Liriodendron tulipifera	28.75	Mature	23	Good	Large	Low	20

TreelD	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
24	Acer rubrum	4	Semi-mature	8	Good	Large	High	20
25	Betula lenta	14	Mature	14	Fair	Large	Moderate	20
26	Betula lenta	11	Mature	11	Good	Large	Moderate	20
27	Sassafras albidum	7.33	Mature	11	Good	Large	Moderate	15
28	Sassafras albidum	8	Mature	12	Fair	Large	Moderate	15
29	Fagus grandifolia	12	Semi-mature	12	Poor	Large	Low	15
30	Sassafras albidum	5	Semi-mature	10	Poor	Large	Low	25
31	Sassafras albidum	5	Semi-mature	10	Fair	Large	Moderate	25
32	Prunus serotina	N/A	Semi-mature	12	Dead	Large	N/A	10
33	Acer rubrum	7	Semi-mature	14	Fair	Large	Moderate	20
34	Quercus rubra	12.67	Semi-mature	19	Fair	Large	Moderate	20
35	Sassafras albidum	10	Mature	15	Fair	Large	Moderate	20
36	Liriodendron tulipifera	18.75	Mature	15	Good	Large	Moderate	20
37	Betula lenta	17	Mature	17	Good	Large	Moderate	25
38	Liriodendron tulipifera	17.5	Mature	14	Fair	Large	Low	25
39	Liriodendron tulipifera	22.5	Mature	18	Good	Large	Moderate	25
40	Liriodendron tulipifera	18.75	Mature	15	Good	Large	Moderate	30
41	Betula lenta	6.67	Semi-mature	10	Good	Large	High	20
42	Betula lenta	7.33	Semi-mature	11	Good	Large	High	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
43	Liriodendron tulipifera	25	Mature	20	Fair	Large	Low	25	
44	Liriodendron tulipifera	18.75	Mature	15	Fair	Large	Low	25	
45	Liriodendron tulipifera	21.25	Mature	17	Fair	Large	Low	25	
46	Betula lenta	10	Mature	10	Good	Large	High	20	
47	Betula lenta	13	Mature	13	Fair	Large	Moderate	20	
48	Liriodendron tulipifera	11	Semi-mature	11	Good	Large	Moderate	20	
49	Liriodendron tulipifera	15	Mature	12	Good	Large	Moderate	20	
50	Liriodendron tulipifera	26.25	Mature	21	Fair	Large	Low	30	
51	Liriodendron tulipifera	21.25	Mature	17	Good	Large	Moderate	30	
52	Liriodendron tulipifera	11	Semi-mature	11	Good	Large	Moderate	25	
53	Acer rubrum	4	Semi-mature	8	Good	Large	High	25	
54	Acer rubrum	5	Semi-mature	10	Good	Large	High	20	
55	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	
56	Betula lenta	8	Mature	8	Good	Large	High	20	
57	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20	
58	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
59	Acer rubrum	10	Mature	15	Poor	Large	Low	20	
60	Liriodendron tulipifera	25	Mature	20	Good	Large	Moderate	25	
61	Liriodendron tulipifera	22.5	Mature	18	Good	Large	Moderate	25	
62	Acer rubrum	7.33	Mature	11	Good	Medium	High	10	
63	Acer rubrum	8.67	Mature	13	Good	Large	High	15	
64	Liriodendron tulipifera	18.75	Mature	15	Good	Large	Moderate	25	



TreelD	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
65	Liriodendron tulipifera	21.25	Mature	17	Good	Large	Moderate	30
66	Liriodendron tulipifera	21.25	Mature	17	Fair	Large	Low	30
67	Betula lenta	10	Mature	10	Good	Large	High	20
68	Betula lenta	6	Semi-mature	9	Fair	Large	Moderate	20
69	Liriodendron tulipifera	10	Semi-mature	10	Good	Large	Moderate	20
70	Liriodendron tulipifera	17.5	Mature	14	Good	Large	Moderate	25
71	Liriodendron tulipifera	20	Mature	16	Good	Large	Moderate	25
72	Liriodendron tulipifera	11	Semi-mature	11	Fair	Large	Low	20
73	Liriodendron tulipifera	25	Mature	20	Fair	Large	Low	25
74	Liriodendron tulipifera	16.25	Mature	13	Good	Large	Moderate	25
75	Liriodendron tulipifera	26.25	Mature	21	Good	Large	Moderate	30
76	Liriodendron tulipifera	9	Semi-mature	9	Good	Large	Moderate	25
77	Betula lenta	N/A	Semi-mature	10	Dead	Medium	N/A	25
78	Liriodendron tulipifera	31.82	Mature	16, 14, 14	Fair	Large	Low	25
79	Acer rubrum	4.5	Semi-mature	9	Fair	Medium	Moderate	15
80	Liriodendron tulipifera	14	Semi-mature	14	Fair	Large	Low	25
81	Betula lenta	6.67	Semi-mature	10	Good	Large	High	20
82	Betula lenta	6	Semi-mature	9	Good	Large	High	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
83	Betula lenta	11	Mature	11	Good	Large	High	20	
84	Liriodendron tulipifera	9	Semi-mature	9	Good	Medium	Moderate	20	
85	Betula lenta	9.07	Semi-mature	11, 8	Fair	Large	Moderate	20	
86	Acer rubrum	9	Semi-mature	18	Good	Large	High	20	
87	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
88	Acer rubrum	6	Mature	9	Good	Large	High	20	
89	Liriodendron tulipifera	23.75	Mature	19	Good	Large	Moderate	25	
90	Liriodendron tulipifera	22.5	Mature	18	Good	Large	Moderate	25	
91	Liriodendron tulipifera	31.25	Mature	25	Good	Large	Moderate	25	
92	Acer rubrum	6.1	Semi-mature	10, 7	Fair	Large	Moderate	25	
93	Sassafras albidum	5.5	Semi-mature	11	Good	Large	High	15	
94	Betula lenta	N/A	Semi-mature	9	Dead	Medium	N/A	15	
95	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	25	
96	Acer rubrum	8.03	Mature	8, 9	Fair	Large	Moderate	15	
97	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
98	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
99	Acer rubrum	8.97	Mature	10, 9	Fair	Large	Moderate	25	
100	Acer rubrum	N/A	Semi-mature	9	Dead	Small	N/A	10	
101	Liriodendron tulipifera	10	Semi-mature	10	Fair	Large	Low	25	
102	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	
103	Acer rubrum	5.5	Semi-mature	11	Fair	Large	Moderate	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
104	Liriodendron tulipifera	17.5	Mature	14	Good	Large	Moderate	20	
105	Liriodendron tulipifera	18.75	Mature	15	Good	Large	Moderate	20	
106	Prunus serotina	5.33	Semi-mature	8	Fair	Large	Moderate	20	
107	Platanus occidentalis	10.67	Mature	16	Good	Large	High	20	
108	Malus sp	9	Mature	9	Good	Medium	High	10	
109	Quercus velutina	12	Mature	12	Good	Large	High	20	
110	Carya tomentosa	17	Mature	17	Good	Large	Moderate	25	
111	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
112	Liriodendron tulipifera	21.25	Mature	17	Good	Large	Moderate	30	
113	Liriodendron tulipifera	25	Mature	20	Good	Large	Moderate	30	
114	Carya tomentosa	14	Mature	14	Good	Large	Moderate	30	
115	Carya tomentosa	15	Mature	15	Good	Large	Moderate	30	
116	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
117	Acer platanoides	17	Mature	17	Good	Large	High	25	
118	Prunus serotina	12	Mature	12	Fair	Large	Moderate	25	
119	Betula lenta	14.14	Mature	10, 8, 6	Good	Large	High	20	
120	Liriodendron tulipifera	21.25	Mature	17	Good	Large	Moderate	25	
121	Liriodendron tulipifera	15	Mature	12	Good	Large	Moderate	25	
122	Quercus velutina	18	Mature	18	Fair	Large	Moderate	25	
123	Liriodendron tulipifera	20	Mature	16	Good	Large	Moderate	25	
124	Liriodendron tulipifera	20	Mature	16	Good	Large	Moderate	25	
125	Populus deltoides	14	Mature	14	Fair	Large	Moderate	25	
126	Platanus occidentalis	5	Semi-mature	10	Good	Medium	High	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
127	Liriodendron tulipifera	10	Semi-mature	10	Good	Large	Moderate	20
128	Liriodendron tulipifera	23.75	Mature	19	Good	Large	Moderate	25
129	Fraxinus americana	15	Mature	12	Fair	Large	Moderate	25
130	Acer rubrum	5.33	Mature	8	Good	Large	High	20
131	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20
132	Acer rubrum	10.67	Mature	16	Good	Large	High	20
133	Acer rubrum	7.33	Mature	11	Good	Large	High	20
134	Acer rubrum	8	Mature	12	Good	Large	High	20
135	Acer rubrum	7.33	Mature	11	Good	Large	High	20
136	Acer rubrum	10.67	Mature	16	Poor	Large	Low	20
137	Acer rubrum	10	Mature	15	Good	Large	High	20
138	Acer rubrum	15.33	Mature	23	Good	Large	High	30
139	Acer rubrum	5	Semi-mature	10	Fair	Large	Moderate	30
140	Acer rubrum	12	Mature	18	Good	Large	High	30
141	Acer rubrum	8	Mature	12	Good	Large	High	20
142	Acer rubrum	10	Mature	15	Good	Large	High	30
143	Acer rubrum	10.67	Mature	16	Good	Large	High	30
144	Acer rubrum	11.33	Mature	17	Good	Large	High	25
145	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20
146	Acer rubrum	7.33	Mature	11	Good	Large	High	20
147	Malus sp	9	Mature	9	Fair	Large	Moderate	20
148	Malus sp	9	Mature	9	Fair	Medium	Moderate	15
149	Prunus serotina	15	Mature	15	Fair	Large	Moderate	15
150	Sassafras albidum	10	Mature	15	Fair	Large	Moderate	20
151	Sassafras albidum	11.33	Mature	17	Fair	Large	Moderate	25

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
152	Sassafras albidum	4.5	Semi- mature	9	Poor	Medium	Low	15	
153	Acer rubrum	10	Mature	15	Good	Large	High	15	
154	Acer rubrum	4.5	Semi- mature	9	Good	Large	High	15	
155	Acer rubrum	4	Semi- mature	8	Good	Large	High	15	
156	Liriodendron tulipifera	22.5	Mature	18	Good	Large	Moderate	20	
157	Acer rubrum	4.5	Semi- mature	9	Good	Large	High	15	
158	Acer rubrum	5	Semi- mature	10	Good	Large	High	15	
159	Acer rubrum	4.5	Semi- mature	9	Fair	Large	Moderate	10	
160	Acer rubrum	7	Semi- mature	14	Good	Large	High	10	
161	Acer rubrum	5	Semi- mature	10	Good	Large	High	10	
162	Acer rubrum	5.39	Semi- mature	10, 4	Good	Medium	High	15	
163	Betula lenta	15	Mature	15	Good	Large	High	25	
164	Acer rubrum	4	Semi- mature	8	Good	Large	High	15	
165	Betula lenta	13	Mature	13	Good	Large	High	15	
166	Quercus velutina	16	Mature	16	Good	Large	High	25	
167	Acer rubrum	9.48	Mature	11, 9	Fair	Large	Moderate	20	
168	Acer rubrum	7.77	Mature	10, 6	Good	Large	High	20	
169	Acer rubrum	10	Mature	15	Good	Large	High	20	
170	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	20	
171	Betula lenta	10	Mature	10	Good	Large	High	15	
172	Quercus velutina	19	Mature	19	Fair	Large	Moderate	30	
173	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	15	
174	Betula lenta	6	Semi- mature	9	Good	Large	High	15	



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
175	Betula lenta	6.67	Semi-mature	8, 6	Good	Large	High	15	
176	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
177	Acer rubrum	N/A	Semi-mature	8	Dead	Medium	N/A	10	
178	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15	
179	Quercus velutina	24	Mature	24	Fair	Large	Moderate	35	
180	Betula lenta	19.57	Mature	11, 10, 9, 9	Fair	Large	Moderate	25	
181	Betula lenta	6	Semi-mature	9	Good	Large	High	15	
182	Acer rubrum	5	Semi-mature	10	Good	Large	High	15	
183	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
184	Betula lenta	6	Semi-mature	9	Fair	Large	Moderate	15	
185	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15	
186	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
187	Betula lenta	6.67	Semi-mature	10	Poor	Large	Low	15	
188	Betula lenta	6	Semi-mature	9	Poor	Large	Low	15	
189	Betula lenta	6.67	Semi-mature	10	Fair	Large	Moderate	15	
190	Liriodendron tulipifera	11	Semi-mature	11	Good	Large	Moderate	15	
191	Quercus velutina	12	Mature	12	Poor	Large	Low	15	
192	Betula lenta	N/A	Mature	9	Dead	Large	N/A	10	
193	Quercus velutina	6.67	Semi-mature	10	Good	Large	High	15	
194	Quercus velutina	19	Mature	19	Fair	Large	Moderate	30	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
195	Quercus velutina	15	Mature	15	Fair	Large	Moderate	25	
196	Liriodendron tulipifera	23.75	Mature	19	Good	Large	Moderate	25	
197	Liriodendron tulipifera	28.75	Mature	23	Good	Large	Moderate	35	
198	Acer rubrum	5	Semi-mature	10	Good	Large	High	25	
199	Betula lenta	7.33	Semi-mature	11	Poor	Large	Low	15	
200	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
201	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
202	Betula lenta	6	Semi-mature	9	Good	Large	High	15	
203	Acer rubrum	6	Semi-mature	12	Good	Large	High	15	
204	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
205	Acer rubrum	6	Mature	9	Good	Large	High	15	
206	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15	
207	Acer rubrum	10	Mature	15	Good	Large	High	25	
208	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
209	Acer rubrum	7.33	Mature	11	Good	Large	High	25	
210	Betula lenta	11	Mature	11	Fair	Large	Moderate	20	
211	Acer rubrum	10	Mature	15	Good	Large	High	25	
212	Acer rubrum	12	Mature	18	Good	Large	High	20	
213	Acer rubrum	4	Semi-mature	8	Good	Large	High	20	
214	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
215	Sassafras albidum	8.67	Mature	13	Poor	Large	Low	15	
216	Betula lenta	10	Mature	10	Poor	Large	Low	15	
217	Fraxinus americana	N/A	Semi-mature	8	Dead	Large	N/A	10	
218	Betula lenta	N/A	Mature	14	Dead	Large	N/A	15	

TreelD	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
219	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
220	Acer rubrum	6	Semi-mature	12	Good	Large	High	20	
221	Fraxinus americana	N/A	Mature	14	Dead	Large	N/A	15	
222	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
223	Betula lenta	13.3	Mature	8, 8, 7	Good	Large	High	15	
224	Acer rubrum	8	Mature	12	Good	Large	High	20	
225	Liriodendron tulipifera	28.75	Mature	23	Good	Large	Moderate	30	
226	Betula lenta	6	Semi-mature	9	Good	Large	High	15	
227	Betula lenta	5.33	Semi-mature	8	Good	Large	High	20	
228	Betula lenta	12.08	Mature	11, 5	Good	Large	High	20	
229	Sassafras albidum	5.32	Semi-mature	8, 7	Fair	Medium	Moderate	20	
230	Prunus serotina	6.67	Semi-mature	10	Good	Large	High	20	
231	Betula lenta	6	Semi-mature	9	Good	Large	High	15	
232	Betula lenta	12	Mature	12	Good	Large	High	20	
233	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
234	Betula lenta	6	Semi-mature	9	Fair	Large	Moderate	15	
235	Betula lenta	6	Semi-mature	9	Good	Large	High	15	
236	Quercus velutina	15	Mature	15	Good	Large	High	20	
237	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15	
238	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15	
239	Quercus velutina	12	Mature	12	Fair	Large	Moderate	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
240	Betula lenta	9	Mature	9	Poor	Large	Low	20	
241	Betula lenta	10	Mature	10	Fair	Large	Moderate	20	
242	Betula lenta	9	Mature	9	Good	Large	High	20	
243	Acer rubrum	6	Mature	9	Good	Large	High	20	
244	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15	
245	Betula lenta	10	Mature	10	Good	Large	High	15	
246	Betula lenta	12.81	Mature	10, 8	Poor	Large	Low	15	
247	Prunus serotina	11	Mature	11	Good	Large	High	20	
248	Betula lenta	13	Mature	13	Fair	Large	Moderate	20	
249	Betula lenta	11	Mature	11	Good	Large	High	20	
250	Betula lenta	10	Mature	10	Poor	Large	Low	20	
251	Betula lenta	9	Mature	9	Good	Large	High	15	
252	Betula lenta	8	Mature	8	Fair	Large	Moderate	15	
253	Betula lenta	8	Mature	8	Good	Large	High	15	
254	Betula lenta	8	Mature	8	Good	Large	High	15	
255	Betula lenta	9	Mature	9	Fair	Large	Moderate	15	
256	Quercus velutina	23	Mature	23	Good	Large	High	15	
257	Betula lenta	18	Mature	18	Fair	Large	Moderate	15	
258	Betula lenta	9	Mature	9	Fair	Large	Moderate	15	
259	Malus sp	9	Mature	9	Good	Medium	High	20	
260	Quercus rubra	26	Mature	26	Good	Large	High	25	
261	Quercus rubra	13	Mature	13	Fair	Large	Moderate	25	
262	Betula lenta	8	Mature	8	Good	Large	High	15	
263	Betula lenta	8	Mature	8	Good	Large	High	15	
264	Betula lenta	15.52	Mature	8, 8, 8, 7	Good	Large	High	20	
265	Betula lenta	9	Mature	9	Good	Large	High	20	
266	Betula lenta	11	Mature	11	Poor	Large	Low	25	
267	Betula lenta	11	Mature	11	Good	Large	High	20	
268	Prunus serotina	9	Mature	9	Good	Large	High	20	
269	Betula lenta	8	Mature	8	Fair	Large	Moderate	20	
270	Betula lenta	8	Mature	8	Fair	Large	Moderate	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
271	Liriodendron tulipifera	27.5	Mature	22	Good	Large	Moderate	30
272	Betula lenta	N/A	Mature	10	Dead	Large	N/A	10
273	Betula lenta	N/A	Mature	8	Dead	Medium	N/A	10
274	Betula lenta	8	Mature	8	Poor	Large	Low	15
275	Betula lenta	8	Mature	8	Fair	Large	Moderate	15
276	Acer rubrum	11.33	Mature	17	Good	Large	High	25
277	Quercus velutina	17	Mature	17	Good	Large	High	25
278	Betula lenta	9	Mature	9	Good	Large	High	20
279	Acer rubrum	6.67	Mature	10	Good	Large	High	20
280	Acer palmatum	16.64	Mature	10, 8, 8, 7	Fair	Medium	Moderate	15
281	Populus deltoides	16	Mature	16	Good	Large	High	20
282	Acer rubrum	7.33	Mature	11	Good	Large	High	20
283	Acer rubrum	6	Mature	9	Good	Large	High	20
284	Quercus velutina	25	Mature	25	Good	Large	High	25
285	Fraxinus americana	N/A	Mature	10	Dead	Large	N/A	15
286	Acer rubrum	8	Mature	12	Good	Large	High	20
287	Quercus velutina	20	Mature	20	Good	Large	High	25
288	Quercus velutina	9	Mature	9	Good	Large	High	15
289	Populus deltoides	5.33	Semi-mature	8	Poor	Large	Low	15
290	Fraxinus americana	N/A	Semi-mature	9	Dead	Large	N/A	10
291	Acer rubrum	8	Mature	12	Good	Large	High	15
292	Quercus velutina	6.67	Semi-mature	10	Good	Large	High	15
293	Quercus alba	21	Mature	21	Good	Large	High	20
294	Acer rubrum	8	Mature	12	Poor	Large	Low	15
295	Acer rubrum	7.33	Mature	11	Good	Large	High	15
296	Acer rubrum	4	Semi-mature	8	Good	Large	High	15



TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
297	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
298	Liriodendron tulipifera	22.5	Mature	18	Good	Large	Moderate	25
299	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	20
300	Sassafras albidum	4.5	Semi-mature	9	Good	Large	High	15
301	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
302	Acer rubrum	9.33	Mature	14	Good	Large	High	20
303	Acer rubrum	5.66	Semi-mature	8, 8	Good	Large	High	15
304	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15
305	Quercus alba	6	Semi-mature	9	Good	Large	High	15
306	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
307	Betula lenta	N/A	Mature	12	Dead	Large	N/A	10
308	Quercus velutina	18	Mature	18	Good	Large	High	25
309	Sassafras albidum	4.5	Semi-mature	9	Good	Large	High	15
310	Betula lenta	14	Mature	14	Good	Large	High	25
311	Acer rubrum	9.07	Mature	11, 8	Good	Large	High	20
312	Liriodendron tulipifera	30	Mature	24	Fair	Large	Low	25
313	Quercus velutina	22	Mature	22	Good	Large	High	25
314	Sassafras albidum	6.67	Mature	10	Good	Large	High	15
315	Sassafras albidum	4.5	Semi-mature	9	Fair	Large	Moderate	15
316	Sassafras albidum	4	Semi-mature	8	Good	Large	High	10
317	Sassafras albidum	4.5	Semi-mature	9	Fair	Large	Moderate	10

TreelD	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
318	Sassafras albidum	7.33	Mature	11	Fair	Large	Moderate	20	
319	Sassafras albidum	4.5	Semi-mature	9	Fair	Large	Moderate	15	
320	Sassafras albidum	4.5	Semi-mature	9	Poor	Medium	Low	15	
321	Fraxinus americana	N/A	Mature	11	Dead	Large	N/A	10	
322	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	10	
323	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
324	Acer rubrum	8	Mature	12	Good	Large	High	20	
325	Quercus velutina	12	Mature	12	Good	Large	High	25	
326	Juniperus virginiana	5.33	Semi-mature	8	Fair	Large	Moderate	10	
327	Quercus velutina	14	Mature	14	Good	Large	High	25	
328	Quercus velutina	12	Mature	12	Good	Large	High	25	
329	Quercus velutina	24	Mature	24	Fair	Large	Moderate	25	
330	Acer rubrum	10.67	Mature	16	Good	Large	High	25	
331	Acer saccharum	15	Mature	12	Good	Large	High	20	
332	Prunus serotina	16.16	Mature	12, 9, 6	Fair	Large	Moderate	20	
333	Quercus velutina	23	Mature	23	Good	Large	High	25	
334	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	
335	Liriodendron tulipifera	15	Mature	12	Good	Large	Moderate	20	
336	Liriodendron tulipifera	37.5	Mature	30	Good	Large	Moderate	25	
337	Acer rubrum	4	Semi-mature	8	Good	Large	High	10	
338	Acer rubrum	5	Semi-mature	10	Good	Large	High	15	
339	Liriodendron tulipifera	28.75	Mature	23	Good	Large	Moderate	25	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
340	Liriodendron tulipifera	32.72	Mature	19, 18	Good	Large	Moderate	25	
341	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20	
342	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	20	
343	Acer rubrum	8	Mature	12	Good	Large	High	20	
344	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
345	Acer rubrum	10	Mature	15	Good	Large	High	20	
346	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15	
347	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
348	Liriodendron tulipifera	17.5	Mature	14	Good	Large	Moderate	20	
349	Acer rubrum	14	Mature	21	Good	Large	High	25	
350	Acer rubrum	13.33	Mature	20	Good	Large	High	20	
351	Quercus velutina	19	Mature	19	Good	Large	High	30	
352	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	15	
353	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
354	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
355	Malus sp	8	Mature	8	Good	Medium	High	10	
356	Malus sp	27	Mature	27	Fair	Large	Moderate	30	
357	Sassafras albidum	8.67	Mature	13	Fair	Large	Moderate	20	
358	Sassafras albidum	11.33	Mature	17	Fair	Large	Moderate	20	
359	Sassafras albidum	N/A	Mature	18	Dead	Large	N/A	15	
360	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
361	Acer saccharum	12.5	Mature	10	Good	Large	High	25	
362	Fraxinus americana	N/A	Semi-mature	8	Dead	Large	N/A	6	
363	Acer rubrum	4	Semi-mature	8	Fair	Medium	Moderate	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
364	Acer rubrum	5	Semi-mature	10	Fair	Medium	Moderate	20
365	Fraxinus americana	N/A	Mature	16	Dead	Large	N/A	10
366	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	30
367	Acer rubrum	12	Mature	18	Good	Large	High	25
368	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
369	Acer rubrum	12	Mature	18	Good	Large	High	20
370	Fraxinus americana	N/A	Mature	12	Dead	Large	N/A	15
371	Liriodendron tulipifera	30.75	Mature	22, 11	Good	Large	Moderate	20
372	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
373	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
374	Acer rubrum	7.33	Mature	11	Good	Large	High	15
375	Fraxinus americana	N/A	Mature	15	Dead	Large	N/A	15
376	Sassafras albidum	10	Mature	15	Good	Large	High	15
377	Acer rubrum	7.33	Mature	11	Poor	Medium	Low	10
378	Acer rubrum	5.33	Mature	8	Good	Large	High	15
379	Acer rubrum	4.5	Semi-mature	9	Good	Medium	High	25
380	Acer rubrum	10.67	Mature	16	Good	Large	High	25
381	Acer rubrum	13.33	Mature	20	Good	Large	High	25
382	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20
383	Acer rubrum	14	Mature	21	Fair	Large	Moderate	25
384	Platanus occidentalis	4	Semi-mature	8	Poor	Large	Low	15
385	Acer rubrum	8	Mature	12	Good	Large	High	20
386	Acer rubrum	5.66	Semi-mature	8, 8	Fair	Medium	Moderate	15

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
387	Acer rubrum	10	Mature	15	Good	Large	High	20	
388	Quercus alba	26	Mature	26	Fair	Large	Moderate	30	
389	Quercus alba	37	Mature	37	Fair	Large	Moderate	30	
390	Sassafras albidum	10	Mature	15	Good	Large	High	15	
391	Sassafras albidum	6.67	Mature	10	Good	Large	High	15	
392	Sassafras albidum	7.33	Mature	11	Good	Large	High	15	
393	Acer rubrum	4.5	Semi-mature	9	Poor	Medium	Low	15	
394	Quercus rubra	26	Mature	26	Fair	Large	Moderate	25	
395	Acer rubrum	11.33	Mature	17	Good	Large	High	20	
396	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
397	Sassafras albidum	7.33	Mature	11	Good	Large	High	15	
398	Sassafras albidum	6.67	Mature	10	Good	Large	High	15	
399	Acer rubrum	8	Mature	12	Poor	Large	Low	25	
400	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
401	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
402	Fraxinus americana	13.75	Mature	11	Poor	Large	Low	10	
403	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
404	Acer rubrum	14.67	Mature	22	Good	Large	High	25	
405	Acer rubrum	16	Mature	24	Good	Large	High	25	
406	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	20	
407	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20	
408	Acer rubrum	10.67	Mature	16	Good	Large	High	30	
409	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
410	Acer rubrum	6.67	Mature	10	Poor	Medium	Low	15	
411	Acer platanoides	10	Mature	10	Good	Large	High	30	
412	Acer rubrum	11.33	Mature	17	Good	Large	High	25	



TreelD	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
413	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20	
414	Fraxinus americana	12.5	Mature	10	Poor	Large	Low	20	
415	Acer rubrum	10	Mature	15	Good	Large	High	30	
416	Acer rubrum	6.67	Mature	10	Poor	Medium	Low	30	
417	Paulownia tomentosa	8.14	Mature	10, 7	Fair	Large	Moderate	20	
418	Platanus occidentalis	5	Semi-mature	10	Good	Large	High	10	
419	Platanus occidentalis	6.67	Mature	10	Good	Large	High	20	
420	Platanus occidentalis	6.67	Mature	10	Good	Large	High	20	
421	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
422	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
423	Acer rubrum	8	Mature	12	Good	Large	High	20	
424	Acer rubrum	8	Mature	12	Good	Large	High	15	
425	Nyssa sylvatica	9.33	Mature	14	Good	Large	High	20	
426	Acer rubrum	N/A	Mature	10	Dead	Large	N/A	15	
427	Acer rubrum	N/A	Mature	27	Dead	Large	N/A	15	
428	Acer rubrum	N/A	Mature	12	Dead	Large	N/A	10	
429	Nyssa sylvatica	12.67	Mature	19	Good	Large	High	15	
430	Nyssa sylvatica	4	Semi-mature	8	Good	Large	High	10	
431	Betula lenta	12	Mature	12	Poor	Large	Low	15	
432	Acer rubrum	13.23	Mature	15, 13	Fair	Large	Moderate	20	
433	Acer rubrum	10.67	Mature	16	Poor	Large	Low	20	
434	Prunus serotina	6	Semi-mature	9	Poor	Medium	Low	15	
435	Acer rubrum	N/A	Mature	11	Dead	Large	N/A	10	
436	Acer rubrum	N/A	Mature	14	Dead	Large	N/A	15	
437	Acer rubrum	N/A	Mature	12	Dead	Large	N/A	10	
438	Acer rubrum	N/A	Mature	12	Dead	Large	N/A	10	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
439	Quercus velutina	N/A	Mature	15	Dead	Large	N/A	20	
440	Acer rubrum	N/A	Mature	15	Dead	Large	N/A	15	
441	Sassafras albidum	6.67	Mature	10	Good	Large	High	20	
442	Quercus velutina	18	Mature	18	Good	Large	High	20	
443	Acer rubrum	8	Mature	12	Good	Large	High	15	
444	Carya glabra	5.33	Semi- mature	8	Good	Large	High	10	
445	Betula lenta	6	Semi- mature	9	Good	Large	High	15	
446	Betula lenta	13	Mature	13	Fair	Large	Moderate	20	
447	Betula lenta	10	Mature	10	Fair	Large	Moderate	20	
448	Betula lenta	11	Mature	11	Fair	Large	Moderate	15	
449	Quercus velutina	26	Mature	26	Good	Large	High	35	
450	Acer rubrum	8.67	Mature	13	Good	Large	High	15	
451	Quercus velutina	26	Mature	26	Good	Large	High	35	
452	Nyssa sylvatica	9.33	Mature	14	Good	Large	High	20	
453	Liriodendron tulipifera	41.25	Mature	33	Good	Large	Moderate	35	
454	Acer rubrum	6	Mature	9	Fair	Large	Moderate	15	
455	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
456	Prunus serotina	9	Mature	9	Fair	Large	Moderate	15	
457	Acer rubrum	10	Mature	15	Good	Large	High	20	
458	Liriodendron tulipifera	38.75	Mature	31	Good	Large	Moderate	30	
459	Betula lenta	14	Mature	14	Good	Large	High	20	
460	Betula lenta	10	Mature	10	Good	Large	High	20	
461	Acer rubrum	13.33	Mature	20	Good	Large	High	20	
462	Acer rubrum	14	Mature	21	Good	Large	High	15	
463	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
464	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
465	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
466	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15	

TreelD	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
467	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	10
468	Betula lenta	6.67	Semi-mature	10	Fair	Large	Moderate	15
469	Betula lenta	12	Mature	12	Good	Large	High	20
470	Acer rubrum	7.33	Mature	11	Good	Large	High	15
471	Acer rubrum	7.33	Mature	11	Good	Large	High	15
472	Quercus velutina	14	Mature	14	Fair	Large	Moderate	25
473	Carya glabra	5.33	Semi-mature	8	Good	Large	High	10
474	Acer rubrum	10	Mature	15	Good	Large	High	20
475	Acer rubrum	8.67	Mature	13	Good	Large	High	20
476	Carya glabra	10	Mature	10	Good	Large	High	15
477	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
478	Betula lenta	8	Semi-mature	12	Good	Large	High	15
479	Liriodendron tulipifera	8	Semi-mature	8	Good	Large	Moderate	15
480	Liriodendron tulipifera	22.5	Mature	18	Poor	Large	Low	25
481	Liriodendron tulipifera	18.75	Mature	15	Good	Large	Moderate	25
482	Liriodendron tulipifera	21.25	Mature	17	Good	Large	Moderate	25
483	Liriodendron tulipifera	25	Mature	20	Good	Large	Moderate	25
484	Ailanthus altissima	7.33	Mature	11	Good	Large	High	20
485	Betula lenta	6	Semi-mature	9	Good	Large	High	15
486	Prunus serotina	5.33	Semi-mature	8	Fair	Medium	Moderate	25
487	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
488	Acer rubrum	12	Mature	18	Good	Large	High	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
489	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
490	Carya glabra	14	Mature	14	Good	Large	High	20
491	Carya glabra	5.33	Semi-mature	8	Good	Large	High	10
492	Acer rubrum	7.33	Mature	11	Good	Large	High	15
493	Acer rubrum	6.67	Mature	10	Good	Large	High	15
494	Carya glabra	5.33	Semi-mature	8	Good	Large	High	15
495	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	10
496	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	10
497	Betula lenta	10	Mature	10	Good	Large	High	20
498	Betula lenta	10	Mature	10	Good	Large	High	20
499	Sassafras albidum	6.67	Mature	10	Fair	Large	Moderate	10
500	Carya glabra	11	Mature	11	Good	Large	High	15
501	Acer rubrum	10	Mature	15	Good	Large	High	25
502	Ulmus americana	N/A	Mature	14	Dead	Medium	N/A	10
503	Betula lenta	5.33	Semi-mature	8	Good	Medium	High	15
504	Acer rubrum	12	Mature	18	Poor	Large	Low	20
505	Betula lenta	14	Mature	14	Good	Large	High	25
506	Betula lenta	12	Mature	12	Good	Large	High	20
507	Betula lenta	N/A	Mature	15	Dead	Large	N/A	10
508	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
509	Quercus velutina	19	Mature	19	Good	Large	High	35
510	Liriodendron tulipifera	40	Mature	32	Good	Large	Moderate	35
511	Carya glabra	10	Mature	10	Good	Large	High	15
512	Betula lenta	5.33	Semi-mature	8	Good	Large	High	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
513	Betula lenta	6	Semi-mature	9	Good	Large	High	15
514	Betula lenta	6	Semi-mature	9	Good	Large	High	15
515	Betula lenta	5.33	Semi-mature	8	Good	Large	High	15
516	Betula lenta	15	Mature	15	Fair	Large	Moderate	20
517	Betula lenta	13	Mature	13	Good	Large	High	15
518	Quercus rubra	21	Mature	21	Good	Large	High	20
519	Betula lenta	14	Mature	14	Poor	Large	Low	20
520	Betula lenta	13	Mature	13	Good	Large	High	20
521	Quercus rubra	5.33	Semi-mature	8	Good	Large	High	15
522	Betula lenta	14	Mature	14	Good	Large	High	15
523	Quercus velutina	6	Semi-mature	9	Good	Large	High	15
524	Liriodendron tulipifera	N/A	Over-mature	20	Dead	Large	N/A	15
525	Betula lenta	N/A	Mature	14	Dead	Large	N/A	0
526	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	25
527	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20
528	Acer rubrum	8.67	Mature	13	Poor	Medium	Low	35
529	Acer rubrum	4	Semi-mature	8	Poor	Medium	Low	15
530	Carya glabra	14	Mature	14	Poor	Large	Low	30
531	Liriodendron tulipifera	35	Mature	28	Poor	Large	Low	25
532	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
533	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
534	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
535	Acer rubrum	12	Mature	18	Poor	Large	Low	15
536	Acer rubrum	8	Mature	12	Poor	Large	Low	10



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
537	Acer rubrum	6	Mature	9	Good	Large	High	10	
538	Sassafras albidum	4.5	Semi- mature	9	Good	Large	High	10	
539	Quercus velutina	11	Mature	11	Fair	Large	Moderate	15	
540	Acer rubrum	14.67	Mature	22	Good	Large	High	20	
541	Carya glabra	5.33	Semi- mature	8	Good	Large	High	15	
542	Carya glabra	11	Mature	11	Good	Large	High	15	
543	Quercus velutina	16	Mature	16	Fair	Large	Moderate	15	
544	Betula lenta	6	Semi- mature	9	Good	Large	High	10	
545	Betula lenta	11	Mature	11	Good	Large	High	15	
546	Quercus rubra	12	Mature	12	Good	Large	High	15	
547	Betula lenta	13	Mature	13	Good	Large	High	15	
548	Liriodendron tulipifera	21.25	Mature	17	Good	Large	Moderate	20	
549	Liriodendron tulipifera	30	Mature	24	Good	Large	Moderate	25	
550	Quercus rubra	5.33	Semi- mature	8	Good	Large	High	10	
551	Acer rubrum	4	Semi- mature	8	Good	Large	High	10	
552	Betula lenta	13	Mature	13	Good	Large	High	25	
553	Quercus rubra	18	Mature	18	Good	Large	High	25	
554	Quercus rubra	6	Semi- mature	9	Good	Large	High	10	
555	Quercus rubra	21	Mature	21	Good	Large	High	30	
556	Betula lenta	6	Semi- mature	9	Good	Large	High	10	
557	Betula lenta	12	Mature	12	Good	Large	High	20	
558	Betula lenta	10	Mature	10	Good	Large	High	15	
559	Betula lenta	15	Mature	15	Good	Large	High	20	
560	Quercus velutina	21	Mature	21	Good	Large	High	25	
561	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	25	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
562	Betula lenta	N/A	Mature	17	Dead	Small	N/A	0	
563	Betula lenta	N/A	Mature	13	Dead	Medium	N/A	0	
564	Betula lenta	18.44	Mature	14, 12	Fair	Large	Moderate	20	
565	Betula lenta	13	Mature	13	Poor	Large	Low	15	
566	Betula lenta	16	Mature	16	Good	Large	High	25	
567	Liriodendron tulipifera	42.5	Mature	34	Fair	Large	Low	25	
568	Liriodendron tulipifera	37.5	Mature	30	Good	Large	Moderate	35	
569	Liriodendron tulipifera	31.25	Mature	25	Good	Large	Moderate	35	
570	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	20	
571	Fagus grandifolia	13.75	Mature	11	Poor	Large	Low	20	
572	Acer rubrum	9.33	Mature	14	Good	Large	High	25	
573	Betula lenta	12	Mature	12	Good	Large	High	25	
574	Betula alleghaniensis	9	Mature	9	Good	Large	High	25	
575	Liriodendron tulipifera	23.75	Mature	19	Good	Large	Moderate	25	
576	Liriodendron tulipifera	17.5	Mature	14	Good	Large	Moderate	20	
577	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Low	15	
578	Carya glabra	21	Mature	21	Good	Large	High	20	
579	Carya glabra	19	Mature	19	Good	Large	High	30	
580	Carya glabra	11	Mature	11	Good	Large	High	15	
581	Ulmus americana	5.33	Semi-mature	8	Fair	Large	Moderate	20	
582	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
583	Betula lenta	12	Mature	12	Fair	Large	Moderate	20	
584	Betula lenta	10	Mature	10	Poor	Large	Low	20	
585	Liriodendron tulipifera	20	Mature	16	Fair	Large	Low	15	
586	Liriodendron tulipifera	9	Semi-mature	9	Poor	Large	Low	6	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
587	Fagus grandifolia	20	Mature	16	Fair	Large	Low	30	
588	Quercus rubra	38	Mature	38	Good	Large	High	50	
589	Liriodendron tulipifera	20	Mature	16	Good	Large	Moderate	20	
590	Liriodendron tulipifera	25	Mature	20	Good	Large	Moderate	30	
591	Liriodendron tulipifera	26.25	Mature	21	Good	Large	Moderate	30	
592	Betula lenta	6	Semi-mature	9	Good	Large	High	20	
593	Betula lenta	10	Mature	10	Good	Large	High	25	
594	Carya ovata	13.75	Mature	11	Good	Large	Moderate	20	
595	Betula lenta	6	Semi-mature	9	Good	Large	High	20	
596	Betula lenta	6	Semi-mature	9	Good	Large	High	20	
597	Liriodendron tulipifera	20	Mature	16	Good	Large	Moderate	25	
598	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
599	Liriodendron tulipifera	13.75	Mature	11	Good	Large	Moderate	20	
600	Liriodendron tulipifera	25	Mature	20	Good	Large	Moderate	25	
601	Liriodendron tulipifera	9	Semi-mature	9	Good	Large	Moderate	20	
602	Liriodendron tulipifera	17.5	Mature	14	Good	Large	Moderate	20	
603	Acer rubrum	14.67	Mature	22	Good	Large	High	30	
604	Betula lenta	14	Mature	14	Good	Large	High	30	
605	Betula lenta	14	Mature	14	Good	Large	High	25	
606	Ulmus americana	17	Mature	17	Poor	Large	Low	35	
607	Acer rubrum	17.33	Mature	26	Good	Large	High	35	
608	Acer rubrum	14.67	Mature	22	Good	Large	High	25	
609	Betula lenta	10	Mature	10	Good	Large	High	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
610	Betula lenta	5.33	Semi-mature	8	Good	Large	High	20
611	Betula lenta	5.33	Semi-mature	8	Good	Large	High	15
612	Betula lenta	12	Mature	12	Good	Large	High	25
613	Betula lenta	5.33	Semi-mature	8	Good	Large	High	15
614	Quercus velutina	44	Mature	44	Poor	Large	Low	35
615	Betula lenta	N/A	Mature	18	Dead	Large	N/A	15
616	Liriodendron tulipifera	20	Mature	16	Good	Large	Moderate	20
617	Betula lenta	21	Mature	21	Good	Large	High	20
618	Betula lenta	22	Mature	22	Good	Large	High	30
619	Quercus velutina	31	Mature	31	Good	Large	High	40
620	Betula lenta	21	Mature	21	Good	Large	High	25
621	Carya glabra	18	Mature	18	Good	Large	High	30
622	Betula lenta	27	Mature	27	Fair	Large	Moderate	35
623	Betula lenta	18	Mature	18	Good	Large	High	30
624	Quercus alba	37	Mature	37	Fair	Large	Moderate	50
625	Betula lenta	5.33	Semi-mature	8	Good	Large	High	20
626	Carya glabra	6	Semi-mature	9	Good	Large	High	15
627	Carya ovata	17	Semi-mature	17	Good	Large	Moderate	25
628	Betula lenta	9	Mature	9	Good	Large	High	20
629	Acer rubrum	7.33	Mature	11	Good	Large	High	15
630	Carya glabra	13	Mature	13	Good	Large	High	25
631	Carya glabra	17	Mature	17	Good	Large	High	30
632	Betula lenta	15	Mature	15	Fair	Large	Moderate	25
633	Betula lenta	10	Mature	10	Fair	Large	Moderate	25
634	Fagus grandifolia	8	Semi-mature	8	Fair	Large	Low	20
635	Betula lenta	12	Mature	12	Fair	Large	Moderate	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
636	Carya tomentosa	15	Mature	15	Good	Large	Moderate	20	
637	Betula lenta	9	Mature	9	Good	Large	High	15	
638	Betula lenta	10	Mature	10	Fair	Large	Moderate	15	
639	Liriodendron tulipifera	17.5	Mature	14	Good	Large	Moderate	20	
640	Fagus grandifolia	8	Semi- mature	8	Poor	Large	Low	10	
641	Fagus grandifolia	9	Semi- mature	9	Poor	Large	Low	15	
642	Acer rubrum	18.67	Mature	28	Good	Large	High	35	
643	Betula lenta	6	Semi- mature	9	Good	Large	High	20	
644	Betula lenta	6	Semi- mature	9	Good	Large	High	20	
645	Liriodendron tulipifera	22.5	Mature	18	Good	Large	Moderate	25	
646	Ailanthus altissima	4	Semi- mature	8	Good	Large	High	15	
647	Betula lenta	6	Semi- mature	9	Fair	Large	Moderate	30	
648	Betula lenta	17	Mature	17	Good	Large	High	25	
649	Betula lenta	14	Mature	14	Poor	Large	Low	30	
650	Betula lenta	N/A	Mature	12	Dead	Large	N/A	15	
651	Carya glabra	21	Mature	21	Fair	Large	Moderate	35	
652	Carya glabra	26	Mature	26	Good	Large	High	35	
653	Carya glabra	17	Mature	17	Good	Large	High	25	
654	Acer saccharum	16.25	Mature	13	Good	Large	High	25	
655	Carya glabra	14	Mature	14	Good	Large	High	20	
656	Fagus grandifolia	31.25	Mature	25	Fair	Large	Low	35	
657	Betula lenta	N/A	Mature	14	Dead	Large	N/A	15	
658	Carya ovata	27.5	Mature	22	Good	Large	Moderate	35	
659	Liriodendron tulipifera	18.75	Mature	15	Fair	Large	Low	20	
660	Fagus grandifolia	9	Semi- mature	9	Fair	Large	Low	20	



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
661	Fagus grandifolia	13.75	Mature	11	Good	Large	Moderate	20	
662	Fagus grandifolia	4	Young	4	Good	Medium	Moderate	10	Wetland
663	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	15	Wetland
664	Ulmus americana	6.67	Semi-mature	10	Good	Large	High	25	Wetland
665	Fagus grandifolia	5	Young	5	Fair	Medium	Low	10	Wetland
666	Fagus grandifolia	7	Young	7	Good	Large	Moderate	15	Wetland
667	Fagus grandifolia	5	Young	5	Fair	Medium	Low	10	Wetland
668	Fagus grandifolia	21.25	Mature	17	Fair	Large	Low	20	Wetland
669	Fagus grandifolia	15	Mature	12	Fair	Large	Low	20	Wetland
670	Fagus grandifolia	8	Semi-mature	8	Fair	Large	Low	15	Wetland
671	Fagus grandifolia	18.75	Mature	15	Fair	Large	Low	30	Wetland
672	Fagus grandifolia	6	Young	6	Poor	Medium	Low	15	Wetland
673	Fagus grandifolia	16.25	Mature	13	Poor	Large	Low	25	Wetland
674	Nyssa sylvatica	14	Mature	21	Good	Large	High	30	Wetland
675	Quercus alba	24	Mature	24	Fair	Large	Moderate	30	Wetland
676	Fagus grandifolia	7	Semi-mature	7	Poor	Large	Low	10	Wetland
677	Fagus grandifolia	4	Young	4	Poor	Large	Low	8	Wetland
678	Fagus grandifolia	32.6	Mature	22, 14	Fair	Large	Low	35	Wetland
679	Fagus grandifolia	6	Young	6	Poor	Medium	Low	15	Wetland
680	Fagus grandifolia	4	Young	4	Poor	Medium	Low	8	Wetland
681	Fagus grandifolia	N/A	Semi-mature	9	Dead	Medium	N/A	2	
682	Fagus grandifolia	23.75	Mature	19	Poor	Large	Low	30	
683	Fagus grandifolia	17.5	Mature	14	Poor	Large	Low	40	
684	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Low	30	
685	Fagus grandifolia	15	Mature	12	Poor	Large	Low	25	Wetland
686	Acer rubrum	13.33	Mature	20	Poor	Large	Low	25	Wetland
687	Fagus grandifolia	15	Mature	12	Poor	Large	Low	30	Wetland
688	Fagus grandifolia	5	Young	5	Poor	Medium	Low	15	Wetland

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
689	Fagus grandifolia	18.75	Mature	15	Fair	Large	Low	25	Wetland
690	Fagus grandifolia	16.25	Mature	13	Poor	Large	Low	25	Wetland
691	Fagus grandifolia	17.5	Mature	14	Fair	Large	Low	35	Wetland
692	Fagus grandifolia	16.25	Mature	13	Fair	Large	Low	30	Wetland
693	Fagus grandifolia	6	Young	6	Fair	Medium	Low	15	Wetland
694	Fagus grandifolia	5	Young	5	Fair	Medium	Low	25	Wetland
695	Quercus alba	16	Mature	16	Good	Large	High	30	Wetland
696	Carya glabra	21	Mature	21	Good	Large	High	30	Wetland
697	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	35	Wetland
698	Liriodendron tulipifera	31.25	Mature	25	Good	Large	Moderate	35	Wetland
699	Fagus grandifolia	15	Mature	12	Good	Large	Moderate	35	Wetland
700	Betula lenta	13	Mature	13	Good	Large	High	25	
701	Betula lenta	16	Mature	16	Fair	Large	Moderate	20	
702	Betula lenta	N/A	Mature	12	Dead	Large	N/A	6	
703	Betula lenta	19	Mature	19	Good	Large	High	20	
704	Betula lenta	14	Mature	14	Good	Large	High	20	
705	Fagus grandifolia	10	Mature	8	Fair	Large	Low	20	
706	Betula alleghaniensis	17	Mature	17	Good	Large	High	20	
707	Nyssa sylvatica	12.67	Mature	19	Good	Large	High	25	
708	Nyssa sylvatica	8.67	Mature	13	Good	Large	High	20	
709	Nyssa sylvatica	12	Mature	18	Good	Large	High	25	
710	Fagus grandifolia	11.25	Mature	9	Fair	Large	Low	20	
711	Fagus grandifolia	46.25	Mature	37	Fair	Large	Low	40	
712	Fagus grandifolia	13.75	Mature	11	Fair	Large	Low	15	
713	Fagus grandifolia	12.5	Mature	10	Fair	Large	Low	20	
714	Fagus grandifolia	12.5	Mature	10	Fair	Large	Low	15	
715	Fagus grandifolia	42.5	Mature	34	Poor	Large	Low	35	
716	Carya ovata	27.5	Mature	22	Good	Large	Moderate	30	
717	Betula lenta	10	Mature	10	Poor	Large	Low	15	
718	Betula lenta	N/A	Mature	11	Dead	Large	N/A	10	
719	Betula lenta	N/A	Mature	13	Dead	Large	N/A	15	
720	Betula lenta	12	Mature	12	Good	Large	High	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
721	Betula lenta	N/A	Mature	11	Dead	Large	N/A	10	
722	Betula lenta	11	Mature	11	Poor	Large	Low	15	
723	Fagus grandifolia	17.5	Mature	14	Fair	Large	Low	25	
724	Fagus grandifolia	11.25	Mature	9	Fair	Large	Low	20	
725	Fagus grandifolia	15	Mature	12	Fair	Large	Low	25	
726	Betula lenta	17	Mature	17	Good	Large	High	25	
727	Carya glabra	15	Mature	15	Good	Large	High	25	
728	Liriodendron tulipifera	9	Semi-mature	9	Good	Large	Moderate	15	
729	Liriodendron tulipifera	15	Mature	12	Good	Large	Moderate	25	
730	Carya ovata	27.5	Mature	22	Good	Large	Moderate	35	
731	Betula alleghaniensis	18	Mature	18	Fair	Large	Moderate	25	
732	Carya ovata	26.25	Mature	21	Good	Large	Moderate	30	Wetland
733	Fagus grandifolia	15	Mature	12	Fair	Large	Low	30	
734	Fagus grandifolia	15	Mature	12	Fair	Large	Low	25	
735	Betula lenta	13	Mature	13	Good	Large	High	20	
736	Fagus grandifolia	8	Semi-mature	8	Fair	Large	Low	20	
737	Fagus grandifolia	30	Mature	24	Poor	Large	Low	25	
738	Fagus grandifolia	8	Semi-mature	8	Fair	Large	Low	30	
739	Fagus grandifolia	21.25	Mature	17	Fair	Large	Low	30	
740	Liriodendron tulipifera	40	Mature	32	Fair	Large	Low	35	
741	Carya glabra	25	Mature	25	Fair	Large	Moderate	30	
742	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	20	
743	Betula lenta	6	Semi-mature	9	Fair	Large	Moderate	20	
744	Fagus grandifolia	21.25	Mature	17	Poor	Large	Low	20	
745	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Low	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
746	Fagus grandifolia	22.5	Mature	18	Poor	Large	Low	25	
747	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	15	
748	Fagus grandifolia	22.5	Mature	18	Poor	Large	Low	25	
749	Fagus grandifolia	16.25	Mature	13	Poor	Large	Low	20	
750	Fagus grandifolia	18.75	Mature	15	Poor	Large	Low	25	
751	Fagus grandifolia	37.5	Mature	30	Poor	Large	Low	35	
752	Fagus grandifolia	41.25	Mature	33	Poor	Large	Low	35	
753	Betula lenta	12	Mature	12	Fair	Large	Moderate	20	
754	Betula lenta	15	Mature	15	Good	Large	High	25	
755	Betula lenta	20	Mature	20	Good	Large	High	30	
756	Betula lenta	18	Mature	18	Poor	Large	Low	25	
757	Fagus grandifolia	13.75	Mature	11	Fair	Large	Low	25	
758	Fagus grandifolia	15	Mature	12	Fair	Large	Low	30	
759	Betula lenta	20	Mature	20	Poor	Large	Low	30	
760	Betula lenta	14	Mature	14	Poor	Large	Low	25	
761	Paulownia tomentosa	12	Mature	18	Good	Large	High	25	
762	Ailanthus altissima	4.5	Semi-mature	9	Fair	Large	Moderate	15	
763	Ailanthus altissima	5	Semi-mature	10	Fair	Large	Moderate	20	
764	Paulownia tomentosa	7.33	Mature	11	Fair	Large	Moderate	20	
765	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	
766	Fagus grandifolia	10	Semi-mature	10	Fair	Large	Low	20	
767	Fagus grandifolia	27.5	Mature	22	Fair	Large	Low	30	
768	Fagus grandifolia	25	Mature	20	Poor	Large	Low	35	
769	Paulownia tomentosa	9.33	Mature	14	Good	Large	High	25	
770	Acer rubrum	10	Mature	15	Good	Large	High	20	
771	Ulmus americana	11	Mature	11	Good	Large	High	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
772	Carya glabra	25	Mature	25	Good	Large	High	35	
773	Fagus grandifolia	13.75	Mature	11	Fair	Large	Low	20	
774	Carya glabra	31	Mature	31	Good	Large	High	30	
775	Fagus grandifolia	9	Semi-mature	9	Fair	Large	Low	20	
776	Liriodendron tulipifera	20	Mature	16	Good	Large	Moderate	30	
777	Carya glabra	12	Mature	12	Good	Large	High	20	
778	Betula lenta	22	Mature	22	Poor	Large	Low	25	
779	Fagus grandifolia	20	Mature	16	Fair	Large	Low	30	
780	Fagus grandifolia	15	Mature	12	Poor	Large	Low	25	
781	Fagus grandifolia	32.5	Mature	26	Poor	Large	Low	35	
782	Fagus grandifolia	17.5	Mature	14	Fair	Large	Low	25	
783	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Low	20	
784	Betula lenta	21	Mature	21	Poor	Large	Low	25	
785	Quercus alba	15	Mature	15	Good	Large	High	30	
786	Betula lenta	13	Mature	13	Good	Large	High	30	
787	Fagus grandifolia	23.75	Mature	19	Poor	Large	Low	35	
788	Fagus grandifolia	17.5	Mature	14	Poor	Large	Low	35	
789	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	20	
790	Carya glabra	19	Mature	19	Good	Large	High	35	Wetland
791	Fagus grandifolia	7	Young	7	Poor	Medium	Low	10	Wetland
792	Fagus grandifolia	4	Young	4	Poor	Medium	Low	10	Wetland
793	Fagus grandifolia	5	Young	5	Poor	Medium	Low	6	Wetland
794	Fagus grandifolia	4	Young	4	Poor	Medium	Low	6	Wetland
795	Fagus grandifolia	23.75	Mature	19	Fair	Large	Low	25	Wetland
796	Fagus grandifolia	5.66	Young	4, 4	Poor	Large	Low	10	Wetland
797	Fagus grandifolia	4	Young	4	Poor	Medium	Low	10	Wetland
798	Betula lenta	22	Mature	22	Poor	Large	Low	10	Wetland
799	Fagus grandifolia	8.77	Semi-mature	8, 3, 2	Poor	Large	Low	10	Wetland
800	Fagus grandifolia	13.75	Mature	11	Poor	Large	Low	20	Wetland

TreelD	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
801	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	15	Wetland
802	Fagus grandifolia	18.75	Mature	15	Poor	Large	Low	20	Wetland
803	Fagus grandifolia	22.5	Mature	18	Poor	Large	Low	25	Wetland
804	Fagus grandifolia	17.5	Mature	14	Poor	Large	Low	25	Wetland
805	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Low	20	Wetland
806	Fagus grandifolia	33.75	Mature	27	Poor	Large	Low	35	Wetland
807	Fagus grandifolia	7	Young	7	Poor	Medium	Low	15	Wetland
808	Betula lenta	N/A	Semi-mature	8	Dead	Large	N/A	10	
809	Fagus grandifolia	15	Mature	12	Fair	Large	Low	20	
810	Betula lenta	15	Mature	15	Poor	Large	Low	20	
811	Fagus grandifolia	8	Semi-mature	8	Fair	Large	Low	15	
812	Acer rubrum	7.5	Semi-mature	15	Poor	Large	Low	50	Wetland
813	Fagus grandifolia	5	Young	5	Poor	Medium	Low	10	Wetland
814	Fagus grandifolia	21.25	Mature	17	Poor	Large	Low	20	Wetland
815	Fagus grandifolia	7	Young	7	Fair	Large	Low	10	Wetland
816	Fagus grandifolia	4.47	Young	4, 2	Poor	Medium	Low	10	Wetland
817	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	Wetland
818	Betula lenta	14	Mature	14	Good	Large	High	20	
819	Fagus grandifolia	22.5	Mature	18	Poor	Large	Low	30	
820	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	30	
821	Fagus grandifolia	23.75	Mature	19	Poor	Large	Low	25	
822	Carya glabra	15	Mature	15	Good	Large	High	20	
823	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Low	15	
824	Fagus grandifolia	8	Semi-mature	8	Good	Large	Moderate	15	
825	Fagus grandifolia	13.75	Mature	11	Poor	Large	Low	25	
826	Fagus grandifolia	20	Mature	16	Poor	Large	Low	25	
827	Fagus grandifolia	26.25	Mature	21	Poor	Large	Low	25	



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
828	Fagus grandifolia	13.75	Mature	11	Poor	Large	Low	35	
829	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	20	
830	Fagus grandifolia	14	Semi-mature	14	Poor	Large	Low	35	
831	Fagus grandifolia	13	Semi-mature	13	Poor	Large	Low	25	
832	Betula lenta	N/A	Semi-mature	8	Dead	Medium	N/A	4	
833	Betula lenta	15	Mature	15	Fair	Large	Moderate	20	
834	Fagus grandifolia	21.25	Mature	17	Poor	Large	Low	30	
835	Fagus grandifolia	28.75	Mature	23	Poor	Large	Low	30	
836	Betula lenta	9	Mature	9	Good	Large	High	25	
837	Quercus alba	24	Mature	24	Fair	Large	Moderate	45	
838	Nyssa sylvatica	10	Mature	15	Good	Large	High	25	
839	Quercus alba	21	Mature	21	Good	Large	High	35	
840	Quercus alba	N/A	Mature	24	Dead	Medium	N/A	0	
841	Quercus alba	30	Mature	30	Fair	Large	Moderate	30	
842	Acer rubrum	10.67	Mature	16	Good	Large	High	25	
843	Betula lenta	5.33	Semi-mature	8	Good	Large	High	20	
844	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15	
845	Carya glabra	18	Mature	18	Good	Large	High	25	
846	Ulmus americana	6	Semi-mature	9	Poor	Small	Low	10	
847	Carya glabra	24	Mature	24	Poor	Large	Low	30	
848	Fagus grandifolia	15	Mature	12	Fair	Large	Low	20	
849	Fagus grandifolia	15	Mature	12	Poor	Large	Low	30	
850	Carya glabra	21	Mature	21	Good	Large	High	30	
851	Nyssa sylvatica	10	Mature	15	Good	Large	High	25	
852	Betula lenta	6	Semi-mature	9	Good	Large	High	15	
853	Acer rubrum	12.67	Mature	19	Good	Large	High	25	Wetland

TreelD	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
854	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	30	Wetland
855	Ulmus americana	4.67	Young	7	Fair	Medium	Moderate	15	Wetland
856	Fagus grandifolia	6	Young	6	Poor	Large	Low	15	Wetland
857	Acer rubrum	9.33	Mature	14	Good	Large	High	25	Wetland
858	Acer rubrum	9.33	Mature	14	Good	Large	High	25	Wetland
859	Betula lenta	18	Mature	18	Good	Large	High	20	Wetland
860	Betula lenta	4	Young	6	Poor	Large	Low	10	Wetland
861	Fagus grandifolia	31.25	Mature	25	Poor	Large	Low	30	Wetland
862	Fagus grandifolia	4	Young	4	Fair	Medium	Low	15	Wetland
863	Fagus grandifolia	18.75	Mature	15	Fair	Large	Low	30	Wetland
864	Betula lenta	14	Mature	14	Fair	Large	Moderate	15	Wetland
865	Betula lenta	4	Young	6	Poor	Medium	Low	8	Wetland
866	Fagus grandifolia	35	Mature	28	Fair	Large	Low	25	Wetland
867	Fagus grandifolia	6	Young	6	Poor	Large	Low	10	Wetland
868	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	15	Wetland
869	Fagus grandifolia	6	Young	6	Poor	Large	Low	10	
870	Fagus grandifolia	18.75	Mature	15	Fair	Large	Low	25	
871	Fagus grandifolia	18.75	Mature	15	Poor	Large	Low	20	
872	Fagus grandifolia	17.5	Mature	14	Fair	Large	Low	25	
873	Betula lenta	19	Mature	19	Good	Large	High	25	
874	Betula lenta	6	Semi-mature	9	Good	Large	High	20	
875	Betula lenta	12	Mature	12	Good	Large	High	25	
876	Betula lenta	N/A	Mature	13	Dead	Medium	N/A	0	
877	Betula lenta	10	Mature	10	Good	Large	High	20	
878	Betula lenta	11	Mature	11	Good	Large	High	20	
879	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20	
880	Betula lenta	11	Mature	11	Good	Large	High	15	
881	Carya glabra	15	Mature	15	Good	Large	High	25	
882	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
883	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
884	Fagus grandifolia	N/A	Mature	31	Dead	Large	N/A	35	
885	Fagus grandifolia	13.75	Mature	11	Good	Large	Moderate	35	
886	Betula lenta	13	Mature	13	Good	Large	High	20	
887	Fagus grandifolia	6	Young	6	Fair	Large	Low	15	Wetland
888	Betula lenta	N/A	Mature	11	Dead	Large	N/A	20	Wetland
889	Fagus grandifolia	4	Young	4	Fair	Medium	Low	20	Wetland
890	Betula lenta	17	Mature	17	Good	Large	High	35	Wetland
891	Betula lenta	25	Mature	25	Good	Large	High	25	Wetland
892	Fagus grandifolia	4	Young	4	Fair	Medium	Low	8	Wetland
893	Betula lenta	N/A	Young	7	Dead	Large	N/A	6	Wetland
894	Ulmus americana	N/A	Young	4	Dead	Medium	N/A	6	Wetland
895	Fagus grandifolia	15	Mature	12	Fair	Large	Low	25	
896	Quercus rubra	40	Mature	40	Fair	Large	Moderate	40	
897	Acer rubrum	14.67	Mature	22	Good	Large	High	30	
898	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	15	
899	Fagus grandifolia	20	Mature	16	Poor	Large	Low	30	
900	Carya glabra	22	Mature	22	Good	Large	High	20	
901	Fagus grandifolia	13.75	Mature	11	Fair	Large	Low	20	
902	Carya glabra	14	Mature	14	Fair	Large	Moderate	25	
903	Tsuga canadensis	17.5	Mature	14	Fair	Large	Low	20	
904	Carya ovata	23.75	Mature	19	Good	Large	Moderate	30	
905	Fagus grandifolia	28.75	Mature	23	Fair	Large	Low	35	
906	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	20	
907	Fagus grandifolia	16.25	Mature	13	Fair	Large	Low	25	
908	Acer rubrum	16	Mature	24	Fair	Large	Moderate	35	
909	Acer rubrum	8	Mature	12	Good	Large	High	20	
910	Paulownia tomentosa	11.79	Mature	13, 12	Fair	Large	Moderate	30	
911	Carya tomentosa	10	Mature	10	Good	Large	Moderate	20	
912	Acer rubrum	4	Semi-mature	8	Poor	Medium	Low	20	
913	Acer rubrum	11.87	Mature	14, 11	Fair	Large	Moderate	25	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
914	Acer saccharum	16.25	Mature	13	Good	Large	High	20	
915	Betula lenta	14	Mature	14	Fair	Large	Moderate	15	
916	Acer rubrum	10.67	Mature	16	Good	Large	High	30	
917	Betula lenta	11	Mature	11	Good	Large	High	20	
918	Acer saccharum	8	Semi-mature	8	Good	Large	High	15	
919	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
920	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20	
921	Acer saccharum	15	Mature	12	Good	Large	High	20	
922	Nyssa sylvatica	8.67	Mature	13	Good	Large	High	20	
923	Fraxinus americana	N/A	Mature	19	Dead	Large	N/A	0	
924	Betula lenta	13	Mature	13	Good	Large	High	25	
925	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
926	Fagus grandifolia	16.25	Mature	13	Fair	Large	Low	25	
927	Betula lenta	12	Mature	12	Poor	Large	Low	20	
928	Betula lenta	N/A	Mature	11	Dead	Large	N/A	10	
929	Carya glabra	33	Mature	33	Good	Large	High	40	
930	Acer rubrum	12	Mature	18	Fair	Large	Moderate	15	
931	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15	
932	Carya glabra	18	Semi-mature	27	Good	Large	High	30	
933	Carya ovata	17.5	Mature	14	Good	Large	Moderate	30	
934	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	25	
935	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	15	
936	Betula lenta	N/A	Mature	16	Dead	Large	N/A	20	
937	Betula lenta	16	Mature	16	Good	Large	High	25	
938	Ostrya virginiana	12	Mature	12	Fair	Large	Moderate	30	
939	Betula lenta	10	Mature	10	Fair	Large	Moderate	20	
940	Betula lenta	21	Mature	21	Poor	Large	Low	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
941	Betula lenta	13	Mature	13	Fair	Large	Moderate	25	
942	Betula lenta	17	Mature	17	Poor	Large	Low	25	
943	Carya glabra	17	Mature	17	Good	Large	High	25	
944	Fagus grandifolia	22.5	Mature	18	Fair	Large	Low	25	
945	Carya glabra	28	Mature	28	Fair	Large	Moderate	25	
946	Fagus grandifolia	18.75	Mature	15	Fair	Large	Low	25	
947	Fagus grandifolia	21.25	Mature	17	Fair	Large	Low	25	
948	Betula lenta	15	Mature	15	Good	Large	High	25	
949	Betula lenta	16	Mature	16	Fair	Large	Moderate	25	
950	Betula lenta	N/A	Mature	15	Dead	Large	N/A	15	
951	Carya glabra	15	Mature	15	Fair	Large	Moderate	20	
952	Fagus grandifolia	15	Mature	12	Fair	Large	Low	25	
	Liriodendron								
953	tulipifera	27.5	Mature	22	Good	Large	Moderate	25	
954	Fagus grandifolia	12.5	Mature	10	Fair	Large	Low	30	
955	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
	Ailanthus								
956	altissima	4.5	Semi-mature	9	Good	Large	High	20	
957	Acer rubrum	10	Mature	15	Good	Large	High	25	
958	Fagus grandifolia	20	Mature	16	Fair	Large	Low	20	
959	Acer rubrum	10.67	Mature	16	Good	Large	High	15	
960	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
961	Fagus grandifolia	13.75	Mature	11	Poor	Large	Low	20	
962	Fagus grandifolia	8	Semi-mature	8	Fair	Large	Low	20	
963	Betula lenta	15	Mature	15	Fair	Large	Moderate	20	
964	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	25	
965	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	
966	Fagus grandifolia	9	Semi-mature	9	Fair	Large	Low	20	
967	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
968	Acer rubrum	14	Mature	21	Fair	Large	Moderate	30	
969	Betula lenta	23	Mature	23	Good	Large	High	35	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
970	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	
971	Carya glabra	15	Mature	15	Good	Large	High	30	
972	Quercus velutina	22	Mature	22	Fair	Large	Moderate	40	
973	Betula lenta	11	Mature	11	Fair	Large	Moderate	20	
974	Betula lenta	10	Mature	10	Fair	Large	Moderate	30	
975	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	30	
976	Fagus grandifolia	12.5	Mature	10	Fair	Large	Low	25	
977	Acer saccharum	9	Semi-mature	9	Good	Large	High	25	
978	Fagus grandifolia	23.75	Mature	19	Fair	Large	Low	35	
979	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
980	Ailanthus altissima	4.5	Semi-mature	9	Good	Large	High	20	
981	Ailanthus altissima	4	Semi-mature	8	Good	Large	High	20	
982	Ailanthus altissima	6.67	Mature	10	Fair	Large	Moderate	20	
983	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	25	
984	Ailanthus altissima	7.33	Mature	11	Poor	Large	Low	15	
985	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	25	
986	Prunus serotina	11	Mature	11	Poor	Large	Low	3	
987	Ailanthus altissima	6.67	Mature	10	Fair	Large	Moderate	25	
988	Ailanthus altissima	6.67	Mature	10	Fair	Large	Moderate	30	
989	Betula lenta	13	Mature	13	Good	Large	High	30	
990	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	25	
991	Ailanthus altissima	8	Mature	12	Fair	Large	Moderate	25	
992	Ailanthus altissima	8	Mature	12	Fair	Large	Moderate	30	
993	Acer saccharum	18.75	Mature	15	Good	Large	High	30	



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
994	Ailanthus altissima	4.5	Semi-mature	9	Poor	Large	Low	15	
995	Betula lenta	6	Semi-mature	9	Fair	Large	Moderate	25	
996	Fagus grandifolia	17.5	Mature	14	Fair	Large	Low	35	
997	Fagus grandifolia	25	Mature	20	Fair	Large	Low	30	
998	Ailanthus altissima	4.5	Semi-mature	9	Good	Large	High	20	
999	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
1000	Ailanthus altissima	5.7	Semi-mature	9, 7	Fair	Large	Moderate	30	
1001	Acer saccharum	9	Semi-mature	9	Good	Large	High	20	
1002	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20	
1003	Acer rubrum	4	Semi-mature	8	Good	Large	High	20	
1004	Liriodendron tulipifera	18.75	Mature	15	Good	Large	Moderate	35	
1005	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20	
1006	Ailanthus altissima	10	Mature	15	Fair	Large	Moderate	30	
1007	Acer saccharum	8	Semi-mature	8	Good	Large	High	25	
1008	Ailanthus altissima	8.67	Mature	13	Fair	Large	Moderate	25	
1009	Prunus serotina	6	Semi-mature	9	Poor	Large	Low	10	
1010	Acer rubrum	N/A	Mature	10	Dead	Large	N/A	15	
1011	Acer rubrum	7.33	Mature	11	Good	Large	High	25	
1012	Acer rubrum	11.33	Mature	17	Good	Large	High	30	
1013	Carya glabra	13	Mature	13	Good	Large	High	15	
1014	Prunus serotina	16.4	Mature	13, 10	Good	Large	High	25	
1015	Acer rubrum	13.5	Mature	19, 7	Fair	Large	Moderate	25	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1016	Carya glabra	16	Mature	16	Good	Large	High	25	
1017	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
1018	Acer rubrum	7.33	Mature	11	Poor	Large	Low	20	
1019	Betula lenta	5.33	Semi-mature	8	Good	Large	High	20	
1020	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	30	
1021	Ailanthus altissima	8.67	Mature	13	Fair	Large	Moderate	30	
1022	Quercus rubra	25	Mature	25	Good	Large	High	35	
1023	Betula lenta	10	Mature	10	Fair	Large	Moderate	20	
1024	Carya glabra	6	Semi-mature	9	Fair	Large	Moderate	20	
1025	Quercus velutina	18	Mature	18	Fair	Large	Moderate	35	
1026	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	25	
1027	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	30	
1028	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20	
1029	Acer rubrum	10.85	Mature	12, 11	Poor	Large	Low	20	
1030	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	25	
1031	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
1032	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	30	
1033	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
1034	Prunus serotina	19	Mature	19	Poor	Large	Low	30	
1035	Quercus alba	15	Mature	15	Good	Large	High	30	
1036	Acer rubrum	15.33	Mature	23	Fair	Large	Moderate	30	
1037	Liriodendron tulipifera	N/A	Mature	12	Dead	Large	N/A	15	
1038	Acer saccharum	16.25	Mature	13	Good	Large	High	30	
1039	Acer rubrum	12	Mature	18	Good	Large	High	30	
1040	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25	
1041	Acer rubrum	9.91	Mature	11, 10	Fair	Large	Moderate	30	
1042	Acer rubrum	17.33	Mature	26	Good	Large	High	35	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
	Fraxinus							
1043	americana	N/A	Mature	12	Dead	Medium	N/A	2
1044	Acer rubrum	7.21	Mature	9, 6	Fair	Large	Moderate	20
1045	Acer rubrum	24	Mature	36	Fair	Large	Moderate	35
1046	Acer rubrum	12.67	Mature	19	Good	Large	High	30
1047	Quercus coccinea	36	Mature	36	Fair	Large	Moderate	45
1048	Quercus coccinea	29.41	Mature	17, 24	Fair	Large	Moderate	40
1049	Quercus rubra	30	Mature	30	Good	Large	High	40
	Sassafras							
1050	albidum	4	Semi-mature	8	Good	Large	High	10
1051	Quercus velutina	17	Mature	17	Fair	Large	Moderate	30
1052	Acer rubrum	4	Semi-mature	8	Poor	Large	Low	10
	Platanus							
1053	occidentalis	6.67	Mature	10	Good	Large	High	20
1054	Acer rubrum	8.67	Mature	13	Good	Large	High	25
1055	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
1056	Acer rubrum	5	Semi-mature	10	Fair	Large	Moderate	15
1057	Acer rubrum	10.67	Mature	16	Good	Large	High	20
1058	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
1059	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
1060	Acer rubrum	6.67	Mature	10	Poor	Large	Low	10
1061	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15
1062	Acer rubrum	11.33	Mature	17	Good	Large	High	25
1063	Acer rubrum	8.67	Mature	13	Good	Large	High	25
1064	Quercus velutina	28	Mature	28	Fair	Large	Moderate	25
1065	Acer rubrum	9.33	Mature	14	Good	Large	High	20
1066	Acer rubrum	14.67	Mature	22	Good	Large	High	35
1067	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15
1068	Fagus grandifolia	16.25	Mature	13	Fair	Large	Low	25

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1069	Quercus coccinea	24	Mature	24	Fair	Large	Moderate	35	
1070	Liriodendron tulipifera	16.25	Mature	13	Good	Large	Moderate	30	
1071	Quercus coccinea	19	Mature	19	Fair	Large	Moderate	30	
1072	Acer rubrum	11.33	Mature	17	Good	Large	High	30	
1073	Acer rubrum	18.67	Mature	28	Fair	Large	Moderate	20	
1074	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
1075	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	25	
1076	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
1077	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
1078	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15	
1079	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
1080	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20	
1081	Acer rubrum	9.33	Mature	14	Poor	Large	Moderate	20	
1082	Acer rubrum	4	Semi- mature	8	Poor	Large	Low	10	
1083	Acer rubrum	12	Mature	18	Good	Medium	High	30	
1084	Acer rubrum	4.5	Semi- mature	9	Good	Large	High	15	
1085	Acer rubrum	4	Semi- mature	8	Poor	Small	Low	15	
1086	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	20	
1087	Quercus coccinea	32.76	Mature	17, 28	Fair	Large	Moderate	40	
1088	Acer rubrum	6.67	Mature	10	Poor	Large	Low	25	
1089	Acer rubrum	N/A	Semi- mature	8	Dead	Large	N/A	6	
1090	Acer rubrum	4.5	Semi- mature	9	Good	Large	High	10	
1091	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
1092	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
1093	Acer rubrum	14	Mature	21	Fair	Large	Moderate	35	
1094	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15	
1095	Acer rubrum	4	Semi- mature	8	Good	Large	High	10	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1096	Betula lenta	6	Semi-mature	9	Good	Large	High	30
1097	Acer rubrum	10.67	Mature	16	Good	Large	High	20
1098	Quercus coccinea	23	Mature	23	Fair	Large	Moderate	35
1099	Quercus rubra	22	Mature	22	Poor	Large	Low	30
1100	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
1101	Acer rubrum	8.67	Mature	13	Good	Large	High	15
1102	Acer rubrum	7.33	Mature	11	Good	Large	High	15
1103	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
1104	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1105	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	25
1106	Prunus serotina	30	Mature	30	Good	Large	High	30
1107	Acer rubrum	7.33	Mature	11	Good	Large	High	15
1108	Acer rubrum	6.67	Mature	10	Good	Large	High	15
1109	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20
1110	Acer rubrum	6	Mature	9	Fair	Large	Moderate	20
1111	Acer rubrum	8	Mature	12	Good	Large	High	20
1112	Acer rubrum	6.67	Mature	10	Good	Large	High	15
1113	Acer rubrum	9.33	Mature	14	Good	Large	High	20
1114	Fraxinus americana	N/A	Mature	12	Dead	Large	N/A	15
1115	Acer rubrum	6.67	Mature	10	Good	Large	High	20
1116	Acer rubrum	8	Mature	12	Good	Large	High	20
1117	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20
1118	Acer rubrum	7.33	Mature	11	Good	Large	High	20
1119	Acer rubrum	12.67	Mature	19	Good	Large	High	30
1120	Acer rubrum	7.33	Mature	11	Good	Large	High	20
1121	Acer rubrum	14	Mature	21	Good	Large	High	20
1122	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15
1123	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1124	Acer rubrum	13.33	Mature	20	Poor	Large	Low	15	
1125	Acer rubrum	11.33	Mature	17	Good	Large	High	15	
1126	Acer rubrum	17.33	Mature	26	Fair	Large	Moderate	30	
1127	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
1128	Acer rubrum	16.67	Mature	25	Fair	Large	Moderate	35	
1129	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	35	
1130	Acer rubrum	8	Mature	12	Fair	Large	Moderate	40	
1131	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20	
1132	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	25	
1133	Liriodendron tulipifera	8	Semi-mature	8	Fair	Medium	High	15	
1134	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
1135	Acer rubrum	11.33	Mature	17	Good	Large	High	20	
1136	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
1137	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	30	
1138	Acer rubrum	4	Semi-mature	8	Good	Large	High	20	
1139	Acer rubrum	11.33	Mature	17	Good	Large	High	30	
1140	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20	
1141	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
1142	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20	
1143	Quercus velutina	28	Mature	28	Fair	Large	Moderate	40	
1144	Quercus coccinea	24	Mature	24	Fair	Large	Moderate	50	
1145	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
1146	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20	
1147	Acer rubrum	9.33	Mature	14	Good	Large	High	25	
1148	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20	
1149	Acer rubrum	10.67	Mature	16	Poor	Large	Low	20	
1150	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20	
1151	Acer rubrum	9.33	Mature	14	Good	Large	High	25	
1152	Acer rubrum	6.67	Mature	10	Good	Large	High	20	



TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1153	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15
1154	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20
1155	Quercus coccinea	19	Mature	19	Fair	Large	Moderate	35
1156	Quercus coccinea	25	Mature	25	Fair	Large	Moderate	35
1157	Liriodendron tulipifera	16.25	Mature	13	Fair	Large	High	30
1158	Quercus velutina	19	Mature	19	Fair	Large	Moderate	35
1159	Quercus velutina	11	Mature	11	Poor	Medium	Low	6
1160	Quercus rubra	6	Semi-mature	9	Poor	Large	Low	6
1161	Quercus velutina	17	Mature	17	Fair	Large	Moderate	25
1162	Betula lenta	6	Semi-mature	9	Good	Large	High	15
1163	Betula lenta	17	Mature	17	Good	Large	High	30
1164	Betula lenta	11	Mature	11	Good	Large	High	30
1165	Betula lenta	10	Mature	10	Fair	Large	Moderate	30
1166	Quercus coccinea	21	Mature	21	Fair	Large	Moderate	40
1167	Quercus velutina	6	Semi-mature	9	Fair	Large	Moderate	30
1168	Quercus rubra	24	Mature	24	Fair	Large	Moderate	35
1169	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
1170	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
1171	Acer rubrum	8.67	Mature	13	Poor	Large	Low	20
1172	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1173	Acer rubrum	10	Mature	15	Fair	Large	Moderate	25
1174	Acer rubrum	10.87	Mature	11, 8, 9	Poor	Large	Low	20
1175	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	35
1176	Acer rubrum	12	Mature	18	Poor	Large	Low	20
1177	Acer rubrum	6.67	Mature	10	Good	Large	High	15

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1178	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1179	Acer rubrum	20.67	Mature	31	Fair	Large	Moderate	30
1180	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20
1181	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	20
1182	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1183	Acer rubrum	10	Mature	15	Fair	Large	Moderate	30
1184	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20
1185	Acer rubrum	12.67	Mature	19	Good	Large	High	30
1186	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20
1187	Acer rubrum	4.5	Semi-mature	9	Poor	Small	Low	15
1188	Acer rubrum	8	Mature	12	Good	Large	High	20
1189	Acer rubrum	14.67	Mature	22	Poor	Large	Low	25
1190	Acer rubrum	18	Mature	27	Good	Large	High	35
1191	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20
1192	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
1193	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
1194	Acer rubrum	14.67	Mature	22	Good	Large	High	25
1195	Juglans nigra	8	Semi-mature	8	Good	Medium	Moderate	15
1196	Juglans nigra	8	Semi-mature	8	Good	Medium	Moderate	15
1197	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	25
1198	Acer rubrum	12	Mature	18	Fair	Large	Moderate	30
1199	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20
1200	Acer rubrum	9.33	Mature	14	Good	Large	High	15
1201	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
1202	Acer rubrum	12	Mature	18	Poor	Large	Low	20
1203	Acer rubrum	8	Mature	12	Fair	Medium	Moderate	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1204	Acer rubrum	11.33	Mature	17	Good	Large	High	20	
1205	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20	
1206	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20	
1207	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
1208	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	30	
1209	Acer rubrum	14.67	Mature	22	Good	Large	High	25	
1210	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25	
1211	Acer rubrum	12.67	Mature	19	Good	Large	High	25	
1212	Acer rubrum	10.67	Mature	16	Good	Large	High	30	
1213	Acer rubrum	N/A	Mature	11	Dead	Large	N/A	15	
1214	Quercus alba	16	Mature	16	Good	Large	High	25	
1215	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	30	
1216	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
1217	Acer rubrum	10	Mature	15	Fair	Large	High	25	
1218	Acer rubrum	10	Mature	15	Good	Large	High	20	
1219	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
1220	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
1221	Quercus bicolor	11.33	Mature	17	Fair	Large	Moderate	35	
1222	Acer rubrum	4	Semi-mature	8	Good	Large	High	20	
1223	Acer rubrum	12	Mature	18	Good	Large	High	20	
1224	Acer rubrum	16	Mature	24	Poor	Large	Low	30	
1225	Fraxinus americana	N/A	Mature	14	Dead	Large	N/A	15	
1226	Acer rubrum	8	Mature	12	Poor	Large	Low	25	
1227	Acer rubrum	8	Mature	12	Good	Large	High	20	
1228	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
1229	Acer rubrum	14	Mature	21	Good	Large	High	20	
1230	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	25	
1231	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
1232	Acer rubrum	12	Mature	18	Fair	Large	Moderate	20	
1233	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1234	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
1235	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
1236	Acer rubrum	8.67	Mature	13	Good	Large	High	25
1237	Acer rubrum	6.67	Mature	10	Good	Large	High	20
1238	Acer rubrum	10	Mature	15	Good	Large	High	20
1239	Acer rubrum	18	Mature	27	Fair	Large	Moderate	35
1240	Acer rubrum	12	Mature	18	Fair	Large	Moderate	25
1241	Quercus coccinea	23	Mature	23	Fair	Large	Moderate	40
1242	Acer rubrum	7.33	Mature	11	Good	Large	High	20
1243	Acer rubrum	4	Semi-mature	8	Poor	Medium	Low	15
1244	Acer rubrum	4	Semi-mature	8	Poor	Large	Low	20
1245	Acer rubrum	6.67	Mature	10	Poor	Large	Low	25
1246	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	25
1247	Quercus velutina	19	Mature	19	Fair	Large	Moderate	40
1248	Acer rubrum	14	Mature	21	Fair	Large	Moderate	30
1249	Acer rubrum	4	Semi-mature	8	Good	Large	High	20
1250	Betula lenta	13	Mature	13	Good	Large	High	35
1251	Fagus grandifolia	22.5	Mature	18	Poor	Large	Moderate	35
1252	Quercus rubra	5.33	Semi-mature	8	Fair	Large	Moderate	25
1253	Ailanthus altissima	7.33	Mature	11	Fair	Large	Moderate	25
1254	Ailanthus altissima	10.67	Mature	16	Good	Large	High	25
1255	Betula lenta	11	Mature	11	Good	Large	High	35
1256	Ailanthus altissima	4	Semi-mature	8	Poor	Large	Low	10
1257	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	20
1258	Carya ovata	27.5	Mature	22	Poor	Large	Moderate	25

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1259	Carya glabra	22	Mature	22	Fair	Large	Moderate	30	
1260	Betula lenta	21	Mature	21	Good	Large	High	30	
1261	Betula lenta	13	Mature	13	Good	Large	High	20	
1262	Fagus grandifolia	15	Mature	12	Poor	Large	Low	25	
1263	Betula lenta	14	Mature	14	Good	Large	High	30	
1264	Carya glabra	24	Mature	24	Fair	Large	Moderate	45	
1265	Fagus grandifolia	35	Mature	28	Poor	Large	Low	35	
1266	Fagus grandifolia	N/A	Mature	23	Dead	Medium	N/A	0	
1267	Fagus grandifolia	12.5	Mature	10	Poor	Large	Low	20	
1268	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	20	
1269	Fagus grandifolia	N/A	Mature	22	Dead	Large	N/A	15	
1270	Betula lenta	5.33	Semi-mature	8	Fair	Large	Moderate	20	
1271	Betula lenta	14	Mature	14	Good	Large	High	30	
1272	Ailanthus altissima	12	Mature	18	Good	Large	High	35	
1273	Fagus grandifolia	16.25	Mature	13	Poor	Large	Low	35	
1274	Ailanthus altissima	4.5	Semi-mature	9	Good	Large	High	20	
1275	Ailanthus altissima	7.33	Mature	11	Fair	Large	Moderate	20	
1276	Liriodendron tulipifera	13.75	Mature	11	Fair	Large	High	20	
1277	Ailanthus altissima	4.5	Semi-mature	9	Fair	Large	Moderate	20	
1278	Ailanthus altissima	6.67	Mature	10	Fair	Large	Moderate	20	
1279	Fagus grandifolia	N/A	Semi-mature	9	Dead	Medium	N/A	0	Wetland
1280	Fagus grandifolia	13.75	Mature	11	Poor	Large	Low	30	
1281	Carya glabra	13	Mature	13	Good	Large	High	20	
1282	Carya glabra	13	Mature	13	Good	Large	High	20	
1283	Betula lenta	26	Mature	26	Good	Large	High	35	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1284	Acer rubrum	6	Mature	9	Fair	Large	Moderate	20	
1285	Fagus grandifolia	15	Mature	12	Poor	Large	Moderate	30	
1286	Betula lenta	16	Mature	16	Fair	Large	Moderate	35	
1287	Fagus grandifolia	17.5	Mature	14	Poor	Large	Moderate	30	
1288	Fagus grandifolia	16.25	Mature	13	Poor	Large	Low	30	
1289	Ailanthus altissima	8.67	Mature	13	Good	Large	High	25	
1290	Ailanthus altissima	7.33	Mature	11	Fair	Large	Moderate	20	
1291	Ailanthus altissima	7.33	Mature	11	Good	Large	High	30	
1292	Betula lenta	12	Mature	12	Good	Large	High	35	
1293	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20	
1294	Betula lenta	12	Mature	12	Good	Large	High	15	
1295	Sassafras albidum	8	Mature	12	Fair	Large	Moderate	20	
1296	Acer rubrum	4	Semi-mature	8	Good	Large	High	25	
1297	Betula lenta	20	Mature	20	Good	Large	High	35	
1298	Betula lenta	17	Mature	17	Good	Large	High	30	
1299	Betula lenta	5.33	Semi-mature	8	Good	Large	High	25	
1300	Betula lenta	19	Mature	19	Fair	Large	Moderate	35	
1301	Ailanthus altissima	6.67	Mature	10	Fair	Large	Moderate	20	
1302	Fagus grandifolia	22.5	Mature	18	Poor	Large	Low	35	
1303	Betula lenta	21	Mature	21	Good	Large	High	35	
1304	Betula lenta	19	Mature	19	Good	Large	High	30	
1305	Betula lenta	12	Mature	12	Good	Large	High	30	
1306	Carya glabra	30	Mature	30	Fair	Large	Moderate	40	
1307	Betula lenta	24	Mature	24	Good	Large	High	45	
1308	Betula lenta	10	Mature	10	Good	Large	High	20	
1309	Betula lenta	21	Mature	21	Good	Large	High	30	



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1310	Betula lenta	19	Mature	19	Fair	Large	Moderate	25	
1311	Betula lenta	6	Semi-mature	9	Good	Large	High	15	
1312	Fagus grandifolia	25	Mature	20	Poor	Large	Low	20	
1313	Fagus grandifolia	9	Semi-mature	9	Poor	Large	Low	20	
1314	Betula lenta	24	Mature	24	Good	Large	High	30	
1315	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Moderate	25	
1316	Betula lenta	12	Mature	12	Good	Large	High	25	
1317	Acer rubrum	10	Mature	15	Fair	Large	Moderate	35	
1318	Fagus grandifolia	23.75	Mature	19	Poor	Large	Low	45	
1319	Betula lenta	25	Mature	25	Fair	Large	Moderate	40	
1320	Prunus serotina	12	Mature	12	Poor	Large	Low	20	
1321	Ailanthus altissima	8	Mature	12	Fair	Large	Moderate	20	
1322	Betula lenta	18	Mature	18	Fair	Large	Moderate	15	
1323	Ailanthus altissima	6.67	Mature	10	Fair	Large	Moderate	15	
1324	Betula lenta	6	Semi-mature	9	Poor	Medium	Low	20	
1325	Ailanthus altissima	7.33	Mature	11	Fair	Large	Moderate	20	
1326	Betula lenta	13	Mature	13	Fair	Large	Moderate	35	
1327	Fagus grandifolia	20	Mature	16	Poor	Large	Low	35	
1328	Ailanthus altissima	7.33	Mature	11	Fair	Large	Moderate	30	
1329	Ailanthus altissima	6.67	Mature	10	Fair	Large	Moderate	30	
1330	Betula lenta	11	Mature	11	Good	Large	High	25	
1331	Ailanthus altissima	8.67	Mature	13	Fair	Large	Moderate	30	
1332	Ailanthus altissima	5.33	Mature	8	Poor	Large	Low	25	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1333	Ailanthus altissima	8	Mature	12	Fair	Large	Moderate	30
1334	Betula lenta	21	Mature	21	Good	Large	High	35
1335	Fagus grandifolia	18.75	Mature	15	Poor	Large	Low	35
1336	Ailanthus altissima	9.33	Mature	14	Fair	Large	Moderate	30
1337	Ailanthus altissima	8	Mature	12	Good	Large	High	25
1338	Ailanthus altissima	8	Mature	12	Fair	Large	Moderate	25
1339	Acer rubrum	9.33	Mature	14	Good	Large	High	30
1340	Betula lenta	20	Mature	20	Poor	Large	Low	30
1341	Acer rubrum	8	Mature	12	Fair	Large	Moderate	25
1342	Acer rubrum	12	Mature	18	Good	Large	High	30
1343	Acer rubrum	9.33	Mature	14	Poor	Large	Low	20
1344	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
1345	Acer rubrum	11.33	Mature	17	Good	Large	High	20
1346	Acer rubrum	18.67	Mature	28	Poor	Large	Low	35
1347	Acer rubrum	11.33	Mature	17	Good	Large	High	25
1348	Acer rubrum	12	Mature	18	Good	Large	High	20
1349	Acer rubrum	6.67	Mature	10	Good	Large	High	25
1350	Acer rubrum	4	Semi-mature	8	Fair	Medium	Moderate	25
1351	Acer rubrum	11.33	Mature	17	Good	Large	High	30
1352	Acer rubrum	10	Mature	15	Fair	Large	Moderate	30
1353	Quercus coccinea	27	Mature	27	Fair	Large	Moderate	30
1354	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1355	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	35
1356	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1357	Betula lenta	16	Mature	16	Fair	Large	Moderate	25
1358	Acer rubrum	10.67	Mature	16	Good	Large	High	30

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1359	Acer rubrum	7.33	Mature	11	Poor	Medium	Low	15
1360	Quercus velutina	11	Mature	11	Fair	Large	Moderate	15
1361	Acer rubrum	16	Mature	24	Poor	Large	Low	40
1362	Acer rubrum	20.67	Mature	31	Fair	Large	Moderate	35
1363	Quercus coccinea	20	Mature	20	Fair	Large	Moderate	40
1364	Acer rubrum	12	Mature	18	Fair	Large	Moderate	30
1365	Fraxinus americana	N/A	Mature	14	Dead	Large	N/A	10
1366	Acer rubrum	8.67	Mature	13	Good	Large	High	35
1367	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20
1368	Quercus rubra	28	Mature	28	Fair	Large	Moderate	40
1369	Acer rubrum	4.5	Semi-mature	9	Poor	Large	Low	20
1370	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	30
1371	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
1372	Acer rubrum	10	Mature	15	Fair	Large	Moderate	30
1373	Liriodendron tulipifera	N/A	Mature	15	Dead	Large	N/A	15
1374	Acer rubrum	11.33	Mature	17	Good	Large	High	30
1375	Acer rubrum	4.5	Semi-mature	9	Poor	Medium	Low	30
1376	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	35
1377	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20
1378	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	25
1379	Acer rubrum	14	Mature	21	Good	Large	High	30
1380	Acer rubrum	10	Mature	15	Good	Large	High	35
1381	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25
1382	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	25
1383	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
1384	Acer rubrum	15.33	Mature	23	Good	Large	High	35
1385	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1386	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
1387	Acer rubrum	12.67	Mature	19	Poor	Large	Low	50	
1388	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	
1389	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	35	
1390	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
1391	Acer rubrum	7.33	Mature	11	Poor	Large	Low	35	
1392	Acer rubrum	13.33	Mature	20	Good	Large	High	35	
1393	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	25	
1394	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
1395	Acer rubrum	10	Mature	15	Good	Large	High	35	
1396	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	25	
1397	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
1398	Acer rubrum	12	Mature	18	Good	Large	High	30	
1399	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	
1400	Prunus serotina	12	Mature	12	Fair	Large	Moderate	35	
1401	Prunus serotina	16	Mature	16	Good	Large	High	35	
1402	Liriodendron tulipifera	N/A	Mature	12	Dead	Large	N/A	0	
1403	Acer rubrum	9.26	Mature	7, 12	Fair	Large	Moderate	15	
1404	Acer rubrum	10.67	Mature	16	Good	Large	High	35	
1405	Acer rubrum	12	Mature	18	Good	Large	High	30	
1406	Acer rubrum	8.67	Mature	13	Poor	Large	Low	30	
1407	Liriodendron tulipifera	N/A	Mature	13	Dead	Large	N/A	4	
1408	Acer rubrum	7.33	Mature	11	Poor	Large	Low	20	
1409	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
1410	Acer rubrum	12	Mature	18	Poor	Large	Low	20	
1411	Acer rubrum	N/A	Mature	14	Dead	Large	N/A	10	
1412	Quercus coccinea	29	Mature	29	Fair	Large	Moderate	40	
1413	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
1414	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
1415	Acer rubrum	6.67	Mature	10	Good	Large	High	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1416	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	25
1417	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	35
1418	Acer rubrum	10	Mature	15	Fair	Large	Moderate	25
1419	Acer rubrum	4	Semi-mature	8	Good	Large	High	20
1420	Liriodendron tulipifera	N/A	Mature	13	Dead	Large	N/A	10
1421	Liriodendron tulipifera	N/A	Mature	11	Dead	Large	N/A	10
1422	Acer rubrum	14	Mature	21	Good	Large	High	25
1423	Acer rubrum	6.67	Mature	10	Good	Large	High	25
1424	Liriodendron tulipifera	N/A	Mature	11	Dead	Large	N/A	10
1425	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20
1426	Fraxinus americana	N/A	Mature	11	Dead	Large	N/A	6
1427	Acer rubrum	10	Mature	15	Fair	Large	Moderate	35
1428	Acer rubrum	9.33	Mature	14	Poor	Large	Low	20
1429	Acer rubrum	8	Mature	12	Good	Large	High	20
1430	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20
1431	Acer rubrum	4.5	Semi-mature	9	Poor	Large	Low	20
1432	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	30
1433	Quercus rubra	N/A	Mature	11	Dead	Large	N/A	15
1434	Carya tomentosa	14	Mature	14	Fair	Large	High	30
1435	Acer rubrum	12	Mature	18	Good	Large	High	35
1436	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20
1437	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15
1438	Fagus grandifolia	8	Semi-mature	8	Poor	Large	Low	20
1439	Fagus grandifolia	25	Mature	20	Poor	Large	Low	45
1440	Fagus grandifolia	16.25	Mature	13	Poor	Large	Low	30

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1441	Betula lenta	12	Mature	12	Poor	Large	Low	15	
1442	Prunus serotina	6	Semi-mature	9	Fair	Large	Moderate	10	
1443	Prunus serotina	8	Mature	8	Fair	Large	Moderate	20	
1444	Prunus serotina	10	Mature	10	Fair	Large	Moderate	20	
1445	Acer rubrum	N/A	Semi-mature	9	Dead	Large	N/A	20	
1446	Betula lenta	12	Mature	12	Good	Large	High	30	
1447	Acer rubrum	4	Semi-mature	8	Poor	Large	Low	20	
1448	Quercus alba	14	Mature	14	Fair	Large	Moderate	35	
1449	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20	
1450	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	30	
1451	Quercus velutina	23	Mature	23	Fair	Large	Moderate	35	
1452	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
1453	Carya glabra	17	Mature	17	Good	Large	High	30	
1454	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	
1455	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
1456	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	20	
1457	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
1458	Acer rubrum	N/A	Semi-mature	8	Dead	Large	N/A	0	
1459	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
1460	Acer rubrum	7.33	Mature	11	Good	Large	High	25	
1461	Acer rubrum	10	Mature	15	Good	Large	High	35	
1462	Fagus grandifolia	N/A	Mature	11	Dead	Medium	N/A	6	
1463	Acer rubrum	4	Semi-mature	8	Good	Large	High	25	
1464	Acer rubrum	18	Mature	27	Good	Large	High	45	
1465	Acer rubrum	10	Mature	15	Poor	Large	Low	35	
1466	Prunus serotina	21	Mature	21	Fair	Large	Moderate	40	
1467	Acer rubrum	6.67	Mature	10	Poor	Large	Low	25	



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1468	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25	
1469	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
1470	Fraxinus americana	N/A	Mature	15	Dead	Large	N/A	10	
1471	Acer rubrum	7.33	Mature	11	Poor	Large	Low	20	
1472	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
1473	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	20	
1474	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
1475	Acer rubrum	17.33	Mature	26	Good	Large	High	35	
1476	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	25	
1477	Quercus alba	15	Mature	15	Fair	Large	Moderate	25	
1478	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	25	
1479	Acer rubrum	8	Mature	12	Fair	Large	Moderate	25	
1480	Acer rubrum	4	Semi-mature	8	Good	Large	High	20	
1481	Acer rubrum	12	Mature	18	Fair	Large	Moderate	35	
1482	Acer rubrum	N/A	Mature	11	Dead	Large	N/A	15	
1483	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	15	
1484	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
1485	Quercus rubra	19	Mature	19	Fair	Large	Moderate	35	
1486	Acer rubrum	8	Mature	12	Fair	Large	Moderate	30	
1487	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	30	
1488	Acer rubrum	N/A	Mature	10	Dead	Large	N/A	6	
1489	Acer rubrum	4	Semi-mature	8	Good	Large	High	20	
1490	Acer rubrum	8	Mature	12	Good	Large	High	30	
1491	Acer rubrum	8	Mature	12	Poor	Large	Low	30	
1492	Acer rubrum	6	Mature	9	Poor	Large	Low	30	
1493	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	40	
1494	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	25	
1495	Acer rubrum	9.33	Mature	14	Poor	Large	Low	35	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1496	Acer rubrum	10.67	Mature	16	Poor	Large	Low	20	
1497	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	30	
1498	Acer rubrum	13.33	Mature	20	Good	Large	High	35	
1499	Acer rubrum	6.67	Mature	10	Good	Large	High	30	
1500	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
1501	Liriodendron tulipifera	21.25	Mature	17	Poor	Large	Moderate	35	
1502	Liriodendron tulipifera	30	Mature	24	Poor	Large	Moderate	35	
1503	Liriodendron tulipifera	25	Mature	20	Poor	Large	Moderate	35	
1504	Liriodendron tulipifera	32.5	Mature	26	Poor	Large	Low	35	
1505	Liriodendron tulipifera	N/A	Mature	13	Dead	Large	N/A	10	
1506	Quercus rubra	16	Mature	16	Fair	Large	Moderate	35	
1507	Quercus alba	6	Semi-mature	9	Good	Large	High	15	
1508	Acer rubrum	4	Semi-mature	8	Good	Large	High	20	
1509	Quercus velutina	19	Mature	19	Fair	Large	Moderate	35	
1510	Betula lenta	21	Mature	21	Fair	Large	Moderate	35	
1511	Quercus rubra	N/A	Mature	28	Dead	Large	N/A	30	
1512	Liriodendron tulipifera	N/A	Mature	16	Dead	Large	N/A	4	
1513	Quercus velutina	21	Mature	21	Fair	Large	Moderate	35	
1514	Acer rubrum	8.67	Mature	13	Good	Large	High	30	
1515	Quercus coccinea	16	Mature	16	Fair	Large	Moderate	30	
1516	Acer rubrum	6.67	Mature	10	Good	Large	High	30	
1517	Acer rubrum	8.67	Mature	13	Good	Large	High	30	
1518	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	25	
1519	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	
1520	Quercus rubra	19	Mature	19	Fair	Large	Moderate	35	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1521	Carya glabra	11	Mature	11	Good	Large	High	30	
1522	Sassafras albidum	4	Semi-mature	8	Good	Large	High	20	
1523	Sassafras albidum	N/A	Semi-mature	9	Dead	Large	N/A	10	
1524	Sassafras albidum	8.67	Mature	13	Fair	Large	Moderate	15	
1525	Betula lenta	12	Mature	12	Good	Large	High	25	
1526	Sassafras albidum	12	Mature	18	Poor	Large	Low	15	
1527	Sassafras albidum	8	Mature	12	Good	Large	High	20	
1528	Betula lenta	11	Mature	11	Fair	Large	Moderate	30	
1529	Quercus alba	11	Mature	11	Fair	Large	Moderate	30	
1530	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
1531	Betula lenta	11	Mature	11	Poor	Large	Low	25	
1532	Betula lenta	13	Mature	13	Good	Large	High	30	
1533	Betula lenta	12	Mature	12	Good	Large	High	25	
1534	Betula lenta	12	Mature	12	Fair	Large	Moderate	30	
1535	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20	
1536	Liriodendron tulipifera	28.75	Mature	23	Poor	Large	Moderate	35	
1537	Betula lenta	10	Mature	10	Fair	Large	Moderate	30	
1538	Betula lenta	6	Semi-mature	9	Good	Large	High	30	
1539	Betula lenta	18	Mature	18	Good	Large	High	25	
1540	Ailanthus altissima	8	Mature	12	Good	Large	High	20	
1541	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
1542	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
1543	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20	
1544	Quercus alba	23	Mature	23	Good	Large	High	40	
1545	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1546	Quercus rubra	23	Mature	23	Fair	Large	Moderate	35	
1547	Acer rubrum	11.33	Mature	17	Good	Large	High	25	
1548	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20	
1549	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
1550	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
1551	Betula lenta	9	Mature	9	Good	Large	High	20	
1552	Betula lenta	10	Mature	10	Good	Large	High	20	
1553	Prunus serotina	16	Mature	16	Fair	Large	Moderate	35	
1554	Betula lenta	N/A	Mature	11	Dead	Medium	N/A	0	
1555	Betula lenta	16	Mature	16	Good	Large	High	35	
1556	Betula lenta	10	Mature	10	Good	Large	High	20	
1557	Betula lenta	14	Mature	14	Good	Large	High	25	
1558	Betula lenta	5.33	Semi-mature	8	Good	Large	High	15	
1559	Acer rubrum	8	Mature	12	Good	Large	High	15	
1560	Acer rubrum	9.33	Mature	14	Poor	Large	Low	30	
1561	Quercus alba	16	Mature	16	Fair	Large	Moderate	30	
1562	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	30	
1563	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15	
1564	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
1565	Acer rubrum	10	Mature	15	Fair	Large	Moderate	25	
1566	Acer rubrum	8	Mature	12	Good	Large	High	20	
1567	Quercus rubra	16	Mature	16	Fair	Large	Moderate	25	
1568	Acer rubrum	11.33	Mature	17	Good	Large	High	30	
1569	Quercus coccinea	25	Mature	25	Fair	Large	Moderate	45	
1570	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15	
1571	Betula lenta	9	Mature	9	Good	Large	High	15	
1572	Prunus serotina	18	Mature	18	Fair	Large	Moderate	25	
1573	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
1574	Acer rubrum	14	Mature	21	Good	Large	High	20	
1575	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	25	
1576	Acer rubrum	6.67	Mature	10	Good	Large	High	10	
1577	Acer rubrum	8	Mature	12	Good	Large	High	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1578	Acer rubrum	4	Semi-mature	8	Good	Large	High	10
1579	Acer rubrum	10	Mature	15	Good	Large	High	25
1580	Prunus serotina	N/A	Mature	11	Dead	Large	N/A	25
1581	Acer rubrum	9.33	Mature	14	Good	Large	High	20
1582	Acer rubrum	8	Mature	12	Good	Large	High	15
1583	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1584	Acer rubrum	6.67	Mature	10	Poor	Large	Low	10
1585	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
1586	Acer rubrum	7.33	Mature	11	Poor	Large	Low	10
1587	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1588	Acer rubrum	9.33	Mature	14	Good	Large	High	15
1589	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1590	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
1591	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
1592	Acer rubrum	6.67	Mature	10	Good	Large	High	15
1593	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	10
1594	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	30
1595	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	20
1596	Acer rubrum	10	Mature	15	Good	Large	High	20
1597	Acer rubrum	N/A	Mature	10	Dead	Medium	N/A	8
1598	Acer rubrum	10.67	Mature	16	Good	Large	High	20
1599	Acer rubrum	10.67	Mature	16	Good	Large	High	25
1600	Acer rubrum	12.67	Mature	19	Good	Large	High	35
1601	Acer rubrum	10	Mature	15	Good	Large	High	30
1602	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	15
1603	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
1604	Acer rubrum	8	Mature	12	Good	Large	High	20
1605	Acer rubrum	8.67	Mature	13	Good	Large	High	15
1606	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1607	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25	
1608	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20	
1609	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20	
1610	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
1611	Acer rubrum	16.67	Mature	25	Fair	Large	Moderate	30	
1612	Acer rubrum	7.33	Mature	11	Poor	Large	Low	15	
1613	Acer rubrum	4	Semi-mature	8	Good	Large	High	10	
1614	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
1615	Acer rubrum	11.33	Mature	17	Good	Large	High	35	
1616	Acer rubrum	10.67	Mature	16	Good	Large	High	25	
1617	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25	
1618	Acer rubrum	14	Mature	21	Fair	Large	Moderate	25	
1619	Acer rubrum	5.33	Mature	8	Good	Large	High	15	
1620	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	
1621	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
1622	Acer rubrum	9.33	Mature	14	Good	Large	High	15	
1623	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
1624	Acer rubrum	11.33	Mature	17	Good	Large	High	20	
1625	Acer rubrum	10.67	Mature	16	Good	Large	High	25	
1626	Acer rubrum	8	Mature	12	Good	Large	High	20	
1627	Acer rubrum	6.67	Mature	10	Poor	Large	Low	10	
1628	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
1629	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
1630	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
1631	Acer rubrum	6	Mature	9	Fair	Large	Moderate	15	
1632	Acer rubrum	6	Mature	9	Fair	Large	Moderate	10	
1633	Acer rubrum	15.33	Mature	23	Fair	Large	Moderate	25	
1634	Quercus coccinea	30	Mature	30	Fair	Large	Moderate	35	
1635	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
1636	Acer rubrum	16	Mature	24	Fair	Large	Moderate	20	
1637	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1638	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	20	
1639	Acer rubrum	6	Mature	9	Good	Large	High	15	
1640	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	25	
1641	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
1642	Acer rubrum	9.33	Mature	14	Poor	Large	Low	15	
1643	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
1644	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
1645	Acer rubrum	8	Mature	12	Poor	Large	Low	15	
1646	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
1647	Quercus coccinea	31	Mature	31	Fair	Large	Moderate	40	
1648	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
1649	Acer rubrum	15.33	Mature	23	Poor	Large	Low	20	
1650	Acer rubrum	7.33	Mature	11	Poor	Large	Low	15	
1651	Acer rubrum	7.33	Mature	11	Good	Large	High	15	
1652	Acer rubrum	12	Mature	18	Fair	Large	Moderate	25	
1653	Acer rubrum	10	Mature	15	Good	Large	High	25	
1654	Acer rubrum	N/A	Mature	10	Dead	Medium	N/A	0	
1655	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
1656	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
1657	Acer rubrum	9.43	Mature	10, 10	Good	Large	High	20	
1658	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
1659	Liriodendron tulipifera	N/A	Mature	11	Dead	Large	N/A	10	
1660	Liriodendron tulipifera	N/A	Mature	12	Dead	Large	N/A	0	
1661	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
1662	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
1663	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	
1664	Acer rubrum	10	Mature	15	Fair	Large	Moderate	15	
1665	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20	
1666	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	25	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1667	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	10
1668	Acer rubrum	7.33	Mature	11	Good	Large	High	20
1669	Acer rubrum	7.33	Mature	11	Good	Large	High	15
1670	Acer rubrum	6.67	Mature	10	Good	Large	High	15
1671	Acer rubrum	14	Mature	21	Fair	Large	Moderate	25
1672	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1673	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1674	Acer rubrum	12.67	Mature	19	Good	Large	High	25
1675	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20
1676	Acer rubrum	16	Mature	24	Fair	Large	Moderate	35
1677	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15
1678	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15
1679	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1680	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
1681	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15
1682	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	20
1683	Acer rubrum	17.33	Mature	26	Fair	Large	Moderate	20
1684	Acer rubrum	9.33	Mature	14	Good	Large	High	20
1685	Acer rubrum	12	Mature	18	Fair	Large	Moderate	25
1686	Acer rubrum	8	Mature	12	Good	Large	High	15
1687	Acer rubrum	6.67	Mature	10	Good	Large	High	20
1688	Acer rubrum	10.67	Mature	16	Good	Large	High	20
1689	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1690	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
1691	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
1692	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1693	Acer rubrum	4	Semi-mature	Poor	Medium	Low	10	
1694	Acer rubrum	8	Mature	Fair	Large	Moderate	15	
1695	Acer rubrum	12	Mature	Fair	Large	Moderate	25	
1696	Acer rubrum	11.33	Mature	Fair	Large	Moderate	25	
1697	Acer rubrum	15.33	Mature	Good	Large	High	35	
1698	Acer rubrum	7.33	Mature	Good	Large	High	15	
1699	Acer rubrum	6.67	Mature	Good	Large	High	15	
1700	Acer rubrum	7.33	Mature	Good	Large	High	15	
1701	Acer rubrum	4	Semi-mature	Good	Large	High	15	
1702	Acer rubrum	13.33	Mature	Fair	Large	Moderate	20	
1703	Acer rubrum	9.33	Mature	Good	Large	High	20	
1704	Acer rubrum	6.67	Mature	Fair	Large	Moderate	15	
1705	Acer rubrum	12	Mature	Good	Large	High	20	
1706	Acer rubrum	8	Mature	Good	Large	High	15	
1707	Acer rubrum	7.33	Mature	Good	Large	High	15	
1708	Acer rubrum	11.33	Mature	Good	Large	High	20	
1709	Acer rubrum	12.67	Mature	Good	Large	High	30	
1710	Acer rubrum	12.67	Mature	Good	Large	High	30	
1711	Acer saccharum	9	Semi-mature	Good	Large	High	15	
1712	Acer saccharum	21.25	Mature	Fair	Large	Moderate	35	
1713	Acer saccharum	12.5	Mature	Good	Large	High	20	
1714	Acer rubrum	12.67	Mature	Good	Large	High	35	
1715	Acer rubrum	N/A	Mature	Dead	Medium	N/A	0	
1716	Acer rubrum	10	Mature	Fair	Large	Moderate	15	
1717	Acer rubrum	6.67	Mature	Fair	Large	Moderate	15	
1718	Acer rubrum	6.67	Mature	Poor	Large	Low	15	
1719	Robinia pseudoacacia	12	Mature	Fair	Large	Moderate	20	
1720	Acer rubrum	8.67	Mature	Fair	Large	Moderate	25	
1721	Acer rubrum	6.67	Mature	Fair	Large	Moderate	20	
1722	Acer rubrum	10.67	Mature	Fair	Large	Moderate	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
	Robinia							
1723	pseudoacacia	12	Mature	12	Fair	Large	Moderate	15
1724	Acer rubrum	13.33	Mature	20	Good	Large	High	20
1725	Acer rubrum	10	Mature	15	Fair	Large	Moderate	25
1726	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	20
			Semi-					
1727	Acer rubrum	4	mature	8	Poor	Medium	Low	10
1728	Acer rubrum	14	Mature	21	Fair	Large	Moderate	30
1729	Acer rubrum	7.33	Mature	11	Poor	Large	Low	20
	Robinia							
1730	pseudoacacia	12	Mature	12	Poor	Large	Low	15
	Robinia							
1731	pseudoacacia	17	Mature	17	Fair	Large	Moderate	20
1732	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
	Fraxinus							
1733	americana	N/A	Mature	12	Dead	Large	N/A	6
1734	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
	Liriodendron							
1735	tulipifera	N/A	Mature	22	Dead	Large	N/A	10
1736	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
1737	Acer rubrum	5.33	Mature	8	Good	Large	High	15
1738	Acer rubrum	8	Mature	12	Good	Large	High	20
	Liriodendron							
1739	tulipifera	N/A	Mature	14	Dead	Large	N/A	10
1740	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
			Semi-					
1741	Acer rubrum	4	mature	8	Fair	Large	Moderate	15
			Semi-					
1742	Acer rubrum	4.5	mature	9	Good	Large	High	15
1743	Acer rubrum	8.67	Mature	13	Good	Large	High	20
1744	Acer rubrum	10.67	Mature	16	Good	Large	High	20
1745	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	20
1746	Acer rubrum	12.67	Mature	19	Good	Large	High	25
			Semi-					
1747	Ulmus americana	5.33	mature	8	Fair	Large	Moderate	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1748	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
1749	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
1750	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	25	
1751	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
1752	Acer rubrum	11.33	Mature	17	Good	Large	High	20	
1753	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20	
1754	Acer rubrum	6.67	Mature	10	Good	Large	High	20	
1755	Acer rubrum	14	Mature	21	Good	Large	High	25	
1756	Acer rubrum	8	Mature	12	Good	Large	High	20	
1757	Robinia pseudoacacia	10	Mature	10	Fair	Large	Moderate	20	
1758	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	25	
1759	Acer saccharum	47.5	Mature	38	Fair	Large	Moderate	35	
1760	Quercus bicolor	20	Mature	30	Fair	Large	Moderate	35	
1761	Acer saccharum	16.25	Mature	13	Good	Large	High	20	
1762	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15	
1763	Acer saccharum	18.75	Mature	15	Fair	Large	Moderate	25	
1764	Acer saccharum	20	Mature	16	Fair	Large	Moderate	25	
1765	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
1766	Acer saccharum	12.5	Mature	10	Good	Large	High	15	
1767	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	20	
1768	Acer saccharum	21.25	Mature	17	Good	Large	High	25	
1769	Acer saccharum	21.25	Mature	17	Fair	Large	Moderate	25	
1770	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	20	
1771	Robinia pseudoacacia	20	Mature	20	Fair	Large	Moderate	20	
1772	Acer saccharum	18.75	Mature	15	Good	Large	High	25	
1773	Acer saccharum	12.5	Mature	10	Good	Large	High	20	
1774	Acer saccharum	21.25	Mature	17	Good	Large	High	25	
1775	Acer saccharum	22.5	Mature	18	Poor	Large	Low	25	
1776	Acer saccharum	22.5	Mature	18	Good	Large	High	25	
1777	Acer saccharum	16.25	Mature	13	Good	Large	High	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1778	Juglans nigra	23.75	Mature	19	Fair	Large	Low	25	
1779	Liriodendron tulipifera	N/A	Mature	19	Dead	Large	N/A	15	
1780	Acer saccharum	25	Mature	20	Fair	Large	Moderate	25	
1781	Acer saccharum	12.5	Mature	10	Good	Large	High	25	
1782	Quercus bicolor	4	Semi- mature	8	Fair	Large	Moderate	20	
1783	Acer saccharum	17.5	Mature	14	Good	Large	High	25	
1784	Juglans nigra	35	Mature	28	Poor	Large	Low	25	
1785	Acer rubrum	12.29	Mature	12, 14	Fair	Large	Moderate	25	
1786	Acer rubrum	15.33	Mature	23	Fair	Large	Moderate	35	
1787	Acer platanoides	10	Mature	10	Fair	Large	Moderate	20	
1788	Acer rubrum	15.33	Mature	23	Good	Large	High	20	
1789	Acer rubrum	15.33	Mature	23	Good	Large	High	25	
1790	Acer rubrum	10	Mature	15	Good	Large	High	20	
1791	Liriodendron tulipifera	N/A	Mature	15	Dead	Large	N/A	10	
1792	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15	
1793	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15	
1794	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20	
1795	Acer rubrum	4.5	Semi- mature	9	Fair	Large	Moderate	15	
1796	Acer rubrum	8	Mature	12	Poor	Large	Low	15	
1797	Acer rubrum	17.33	Mature	26	Good	Large	High	35	
1798	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
1799	Acer rubrum	16.67	Mature	25	Poor	Large	Low	20	
1800	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25	
1801	Acer saccharum	11.25	Mature	9	Good	Large	High	20	
1802	Carya ovata	12.5	Mature	10	Poor	Large	Moderate	15	
1803	Fraxinus americana	N/A	Mature	12	Dead	Large	N/A	0	
1804	Fraxinus americana	N/A	Mature	16	Dead	Large	N/A	10	
1805	Acer saccharum	13.75	Mature	11	Good	Large	High	20	



TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1806	Fraxinus americana	N/A	Mature	12	Dead	Large	N/A	10
1807	Fraxinus americana	N/A	Mature	19	Dead	Large	N/A	15
1808	Malus sp	8	Mature	8	Poor	Medium	Low	15
1809	Acer rubrum	11.33	Mature	17	Poor	Large	Low	20
1810	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	20
1811	Acer rubrum	16	Mature	24	Poor	Large	Low	20
1812	Acer saccharum	12.5	Mature	10	Good	Large	High	20
1813	Juglans nigra	23.75	Mature	19	Fair	Large	Low	35
1814	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	20
1815	Acer saccharum	12.5	Mature	10	Good	Large	High	20
1816	Juglans nigra	21.25	Mature	17	Fair	Large	Low	20
1817	Acer rubrum	6.67	Mature	10	Good	Large	High	15
1818	Acer saccharum	16.25	Mature	13	Good	Large	High	20
1819	Juglans nigra	32.5	Mature	26	Fair	Large	Low	35
1820	Acer saccharum	9	Semi-mature	9	Poor	Medium	Low	15
1821	Acer saccharum	41.83	Mature	24	Fair	Large	Moderate	30
1822	Acer platanoides	14	Mature	14	Good	Large	High	25
1823	Juglans nigra	35	Mature	28	Fair	Large	Low	40
1824	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	15
1825	Acer saccharum	15	Mature	12	Fair	Large	Moderate	15
1826	Juglans nigra	23.75	Mature	19	Fair	Large	Low	25
1827	Fraxinus americana	N/A	Mature	17	Dead	Large	N/A	10
1828	Acer saccharum	15	Mature	12	Good	Large	High	20
1829	Carya ovata	28.75	Mature	23	Fair	Large	High	25
1830	Acer saccharum	30	Mature	24	Good	Large	High	40
1831	Acer rubrum	15.33	Mature	23	Fair	Large	Moderate	20
1832	Acer saccharum	8	Semi-mature	8	Fair	Large	Moderate	15

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1833	Liriodendron tulipifera	N/A	Mature	14	Dead	Large	N/A	0
1834	Liriodendron tulipifera	N/A	Mature	11	Dead	Large	N/A	0
1835	Acer saccharum	13.75	Mature	11	Good	Large	High	15
1836	Acer saccharum	12.5	Mature	10	Good	Large	High	15
1837	Acer rubrum	14	Mature	21	Fair	Large	Moderate	35
1838	Acer rubrum	11.33	Mature	17	Good	Large	High	30
1839	Acer rubrum	8.67	Mature	13	Good	Large	High	30
1840	Acer rubrum	12	Mature	18	Good	Large	High	25
1841	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
1842	Acer rubrum	N/A	Mature	14	Dead	Medium	N/A	0
1843	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1844	Acer rubrum	16.67	Mature	25	Good	Large	High	35
1845	Liriodendron tulipifera	20	Mature	16	Poor	Large	Low	15
1846	Acer rubrum	7.33	Mature	11	Good	Large	High	15
1847	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
1848	Prunus serotina	N/A	Mature	13	Dead	Large	N/A	6
1849	Liriodendron tulipifera	36.25	Mature	29	Poor	Large	Moderate	35
1850	Acer rubrum	6.67	Mature	10	Good	Large	High	15
1851	Acer rubrum	9.33	Mature	14	Good	Large	High	20
1852	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	25
1853	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	30
1854	Acer platanoides	13	Mature	13	Good	Large	High	20
1855	Liriodendron tulipifera	31.25	Mature	25	Poor	Large	Low	25
1856	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15
1857	Liriodendron tulipifera	21.25	Mature	17	Fair	Large	High	25
1858	Acer saccharum	N/A	Mature	18	Dead	Large	N/A	10
1859	Acer saccharum	13.75	Mature	11	Good	Large	High	25

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1860	Acer saccharum	12.5	Mature	10	Poor	Large	Low	20	
1861	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	20	
1862	Acer saccharum	15	Mature	12	Good	Large	High	20	
1863	Liriodendron tulipifera	N/A	Mature	28	Dead	Large	N/A	15	
1864	Acer saccharum	12.5	Mature	10	Poor	Large	Low	15	
1865	Fraxinus americana	N/A	Mature	18	Dead	Large	N/A	10	
1866	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	25	
1867	Acer saccharum	17.5	Mature	14	Good	Large	High	30	
1868	Acer saccharum	16.25	Mature	13	Good	Large	High	30	
1869	Acer saccharum	12.5	Mature	10	Good	Large	High	25	
1870	Carya ovata	8	Semi-mature	8	Poor	Large	Moderate	10	
1871	Liriodendron tulipifera	N/A	Mature	37	Dead	Large	N/A	20	
1872	Juglans nigra	18.75	Mature	15	Poor	Large	Low	20	
1873	Juglans nigra	22.5	Mature	18	Good	Large	Moderate	20	
1874	Liriodendron tulipifera	12.5	Mature	10	Poor	Large	Moderate	20	
1875	Juglans nigra	27.5	Mature	22	Fair	Large	Low	35	
1876	Liriodendron tulipifera	N/A	Mature	17	Dead	Large	N/A	10	
1877	Liriodendron tulipifera	N/A	Mature	18	Dead	Large	N/A	15	
1878	Acer saccharum	9	Semi-mature	9	Fair	Large	Moderate	25	
1879	Acer rubrum	8	Mature	12	Good	Large	High	20	
1880	Liriodendron tulipifera	N/A	Mature	22	Dead	Large	N/A	15	
1881	Liriodendron tulipifera	20	Mature	16	Fair	Large	High	20	
1882	Liriodendron tulipifera	23.75	Mature	19	Poor	Large	Moderate	30	
1883	Acer saccharum	16.25	Mature	13	Good	Large	High	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1884	Acer saccharum	16.25	Mature	13	Good	Large	High	20	
1885	Acer rubrum	10	Mature	15	Good	Large	High	25	
1886	Acer rubrum	14	Mature	21	Fair	Large	Moderate	35	
1887	Acer saccharum	8	Semi-mature	8	Good	Large	High	15	
1888	Acer rubrum	9.48	Mature	9, 11	Poor	Large	Low	15	
1889	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	25	
1890	Acer saccharum	8	Semi-mature	8	Good	Large	High	15	
1891	Acer rubrum	21.08	Mature	26, 18	Fair	Large	Moderate	35	
1892	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
1893	Acer rubrum	10	Mature	15	Good	Large	High	20	
1894	Acer saccharum	12.5	Mature	10	Good	Large	High	20	
1895	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
1896	Acer rubrum	11.33	Mature	17	Good	Large	High	25	
1897	Acer saccharum	27.5	Mature	22	Good	Large	High	35	
1898	Fraxinus americana	N/A	Mature	13	Dead	Large	N/A	10	
1899	Acer saccharum	17.5	Mature	14	Fair	Large	Moderate	25	
1900	Juglans nigra	35	Mature	28	Fair	Large	Low	40	
1901	Acer saccharum	22.5	Mature	18	Good	Large	High	20	
1902	Juglans nigra	16.25	Mature	13	Fair	Large	Low	15	
1903	Acer saccharum	23.75	Mature	19	Fair	Large	Moderate	30	
1904	Acer saccharum	15	Mature	12	Fair	Large	Moderate	20	
1905	Liriodendron tulipifera	N/A	Mature	39	Dead	Large	N/A	10	
1906	Acer saccharum	16.25	Mature	13	Good	Large	High	25	
1907	Ulmus americana	10	Mature	10	Fair	Large	Moderate	15	
1908	Acer saccharum	21.25	Mature	17	Good	Large	High	25	
1909	Acer saccharum	15	Mature	12	Fair	Large	Moderate	20	
1910	Acer saccharum	16.25	Mature	13	Fair	Large	Moderate	25	
1911	Acer saccharum	9	Semi-mature	9	Good	Large	High	25	
1912	Acer saccharum	16.25	Mature	13	Fair	Large	Moderate	20	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1913	Acer saccharum	8	Semi-mature	8	Good	Large	High	15	
1914	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	
1915	Liriodendron tulipifera	N/A	Mature	11, 13	Dead	Large	N/A	10	
1916	Acer rubrum	4	Semi-mature	8	Good	Large	High	15	
1917	Acer rubrum	8	Mature	12	Good	Large	High	20	
1918	Acer rubrum	4	Semi-mature	8	Good	Large	High	10	
1919	Liriodendron tulipifera	N/A	Semi-mature	8	Dead	Large	N/A	4	
1920	Acer saccharum	12.5	Mature	10	Good	Large	High	15	
1921	Acer saccharum	8	Semi-mature	8	Good	Large	High	15	
1922	Acer saccharum	20	Mature	16	Good	Large	High	25	
1923	Acer rubrum	13.33	Mature	20	Poor	Large	Low	25	
1924	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
1925	Acer rubrum	4	Semi-mature	8	Poor	Medium	Low	8	
1926	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	10	
1927	Liriodendron tulipifera	28.75	Mature	23	Poor	Large	Moderate	25	
1928	Liriodendron tulipifera	36.25	Mature	29	Poor	Large	Moderate	25	
1929	Acer rubrum	10	Mature	15	Fair	Large	Moderate	10	
1930	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	10	
1931	Liriodendron tulipifera	31.25	Mature	25	Poor	Large	Moderate	25	
1932	Betula lenta	11	Mature	11	Fair	Large	Moderate	20	
1933	Betula lenta	5.33	Semi-mature	8	Good	Large	High	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1934	Sassafras albidum	14	Mature	21	Fair	Large	Moderate	20
1935	Acer rubrum	8	Mature	12	Poor	Large	Low	15
1936	Betula lenta	16	Mature	16	Poor	Large	Low	10
1937	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	15
1938	Betula lenta	10	Mature	10	Fair	Large	Moderate	10
1939	Acer saccharum	8	Semi- mature	8	Fair	Large	Moderate	10
1940	Quercus rubra	23	Mature	23	Fair	Large	Moderate	20
1941	Acer saccharum	22.5	Mature	18	Good	Large	High	30
1942	Acer saccharum	9	Semi- mature	9	Fair	Large	Moderate	15
1943	Acer saccharum	25	Mature	20	Fair	Large	Moderate	25
1944	Acer saccharum	13.75	Mature	11	Fair	Large	Moderate	15
1945	Quercus rubra	16	Mature	16	Fair	Large	Moderate	25
1946	Quercus rubra	13	Mature	13	Poor	Large	Low	20
1947	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	25
1948	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
1949	Acer saccharum	16.25	Mature	13	Good	Large	High	20
1950	Acer saccharum	17.5	Mature	14	Good	Large	High	20
1951	Liriodendron tulipifera	25	Mature	20	Poor	Large	Moderate	25
1952	Liriodendron tulipifera	28.75	Mature	23	Poor	Large	Moderate	25
1953	Liriodendron tulipifera	26.25	Mature	21	Poor	Large	Moderate	25
1954	Liriodendron tulipifera	27.5	Mature	22	Poor	Large	Moderate	25
1955	Liriodendron tulipifera	26.25	Mature	21	Poor	Large	Moderate	30
1956	Liriodendron tulipifera	25	Mature	20	Poor	Large	Moderate	25
1957	Liriodendron tulipifera	23.75	Mature	19	Poor	Large	Moderate	20



TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1958	Acer saccharum	9	Semi-mature	9	Good	Large	High	15
1959	Quercus rubra	8	Mature	8	Fair	Large	Moderate	10
1960	Quercus rubra	26	Mature	26	Fair	Large	Moderate	20
1961	Acer saccharum	9	Semi-mature	9	Good	Large	High	15
1962	Acer saccharum	12.5	Mature	10	Good	Large	High	15
1963	Quercus rubra	12	Mature	12	Fair	Large	Moderate	20
1964	Liriodendron tulipifera	27.5	Mature	22	Poor	Large	Moderate	30
1965	Liriodendron tulipifera	25	Mature	20	Poor	Large	Moderate	25
1966	Liriodendron tulipifera	18.75	Mature	15	Poor	Large	Moderate	20
1967	Liriodendron tulipifera	22.5	Mature	18	Poor	Large	Moderate	20
1968	Liriodendron tulipifera	27.5	Mature	22	Poor	Large	Moderate	25
1969	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1970	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
1971	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
1972	Acer rubrum	14.67	Mature	22	Fair	Large	Moderate	20
1973	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	25
1974	Acer rubrum	10	Mature	15	Good	Large	High	25
1975	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15
1976	Acer rubrum	16	Mature	24	Fair	Large	Moderate	30
1977	Acer rubrum	12	Mature	18	Good	Large	High	20
1978	Acer rubrum	12.67	Mature	19	Good	Large	High	25
1979	Acer rubrum	20	Mature	30	Poor	Large	Low	15
1980	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
1981	Acer rubrum	7.33	Mature	11	Good	Large	High	15
1982	Acer rubrum	10.67	Mature	16	Good	Large	High	25
1983	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	25

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
1984	Liriodendron tulipifera	N/A	Mature	11	Dead	Large	N/A	8
1985	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
1986	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
1987	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	20
1988	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	15
1989	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
1990	Liriodendron tulipifera	40	Mature	32	Poor	Large	Moderate	35
1991	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15
1992	Acer rubrum	8	Mature	12	Good	Large	High	20
1993	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
1994	Liriodendron tulipifera	N/A	Mature	17	Dead	Large	N/A	10
1995	Acer rubrum	N/A	Semi-mature	8	Dead	Medium	N/A	4
1996	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	10
1997	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
1998	Acer rubrum	10	Mature	15	Fair	Large	Moderate	15
1999	Acer rubrum	7.33	Mature	11	Good	Large	High	20
2000	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
2001	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20
2002	Acer rubrum	14	Mature	21	Good	Large	High	35
2003	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2004	Acer rubrum	11.33	Mature	17	Good	Large	High	25
2005	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2006	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20
2007	Acer rubrum	6.67	Mature	10	Good	Large	High	15
2008	Liriodendron tulipifera	27.5	Mature	22	Poor	Large	Moderate	35
2009	Acer rubrum	12	Mature	18	Fair	Large	Moderate	15
2010	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	15
2011	Acer rubrum	13.33	Mature	20	Poor	Large	Low	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2012	Acer rubrum	4	Semi-mature	8	Poor	Large	Low	10
2013	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
2014	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
2015	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2016	Acer rubrum	7.33	Mature	11	Poor	Large	Low	15
2017	Acer rubrum	8.67	Mature	13	Poor	Large	Low	20
2018	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	10
2019	Acer rubrum	10.67	Mature	16	Good	Large	High	20
2020	Acer rubrum	6.67	Mature	10	Good	Large	High	15
2021	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
2022	Acer rubrum	8.67	Mature	13	Good	Large	High	15
2023	Liriodendron tulipifera	31.25	Mature	25	Poor	Large	Low	20
2024	Acer rubrum	12	Mature	18	Fair	Large	Moderate	25
2025	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15
2026	Acer rubrum	10.67	Mature	16	Good	Large	High	20
2027	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
2028	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2029	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	15
2030	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	10
2031	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15
2032	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
2033	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
2034	Acer rubrum	9.33	Mature	14	Good	Large	High	20
2035	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	10
2036	Acer rubrum	12	Mature	18	Fair	Large	Moderate	20
2037	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	10
2038	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	20
2039	Liriodendron tulipifera	30	Mature	24	Poor	Large	Low	25

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2040	Acer rubrum	10.67	Mature	16	Poor	Large	Low	15	
2041	Acer rubrum	8	Mature	12	Good	Large	High	15	
2042	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
2043	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
2044	Acer rubrum	8	Mature	12	Fair	Large	Moderate	10	
2045	Acer rubrum	11.33	Mature	17	Poor	Large	Low	15	
2046	Acer rubrum	10.67	Mature	16	Good	Large	High	25	
2047	Acer rubrum	7.33	Mature	11	Poor	Large	Low	10	
2048	Acer rubrum	8.67	Mature	13	Good	Large	High	15	
2049	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	20	
2050	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15	
2051	Acer rubrum	12	Mature	18	Good	Large	High	25	
2052	Acer rubrum	12	Mature	18	Good	Large	High	30	
2053	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
2054	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
2055	Acer rubrum	11.33	Mature	17	Good	Large	High	30	
2056	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	20	
2057	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
2058	Acer rubrum	10	Mature	15	Good	Large	High	30	
2059	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	20	
2060	Acer rubrum	9.33	Mature	14	Good	Large	High	25	
2061	Acer rubrum	12	Mature	18	Good	Large	High	30	
2062	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	20	
2063	Acer rubrum	14	Mature	21	Fair	Large	Moderate	20	
2064	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15	
2065	Acer rubrum	9.33	Mature	14	Good	Large	High	25	
2066	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20	
2067	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
2068	Acer rubrum	11.33	Mature	17	Fair	Large	Moderate	15	
2069	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	35	
2070	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2071	Liriodendron tulipifera	N/A	Mature	19	Dead	Large	N/A	10
2072	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
2073	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25
2074	Acer rubrum	7.33	Mature	11	Good	Large	High	20
2075	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
2076	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2077	Acer rubrum	8	Mature	12	Good	Large	High	30
2078	Acer rubrum	N/A	Semi-mature	8	Dead	Large	N/A	0
2079	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
2080	Prunus serotina	12	Mature	12	Fair	Large	Moderate	15
2081	Prunus serotina	15	Mature	15	Fair	Large	Moderate	25
2082	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
2083	Acer rubrum	6	Mature	9	Poor	Large	Low	10
2084	Acer rubrum	10.67	Mature	16	Good	Large	High	25
2085	Acer rubrum	N/A	Mature	16	Dead	Large	N/A	6
2086	Acer rubrum	12	Mature	18	Fair	Large	Moderate	15
2087	Acer rubrum	8	Mature	12	Good	Large	High	15
2088	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25
2089	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2090	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2091	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
2092	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15
2093	Acer rubrum	13.33	Mature	20	Good	Large	High	30
2094	Acer rubrum	11.33	Mature	17	Good	Large	High	30
2095	Acer rubrum	6.67	Mature	10	Good	Large	High	15
2096	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
2097	Acer rubrum	11.33	Mature	17	Poor	Large	Low	15
2098	Acer rubrum	9.33	Mature	14	Fair	Large	High	15
2099	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
2100	Acer rubrum	10.67	Mature	16	Poor	Large	Low	20
2101	Prunus serotina	14.87	Mature	11, 10	Poor	Large	Low	20
2102	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2103	Platanus occidentalis	7.33	Mature	11	Good	Large	High	20
2104	Acer rubrum	4	Semi-mature	8	Poor	Medium	Low	10
2105	Prunus serotina	6	Semi-mature	9	Fair	Large	Moderate	15
2106	Prunus serotina	6	Semi-mature	9	Poor	Medium	Low	15
2107	Acer rubrum	10	Mature	15	Good	Large	High	20
2108	Acer rubrum	8.67	Mature	13	Poor	Large	Low	20
2109	Acer rubrum	12.67	Mature	19	Good	Large	High	25
2110	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15
2111	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
2112	Fraxinus americana	N/A	Mature	19	Dead	Large	N/A	15
2113	Betula lenta	12	Mature	12	Good	Large	High	15
2114	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
2115	Aralia spinosa	12	Mature	12	Fair	Medium	Moderate	15
2116	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20
2117	Acer rubrum	16	Mature	24	Fair	Large	Moderate	30
2118	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
2119	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
2120	Acer saccharum	9	Semi-mature	9	Good	Large	High	15
2121	Acer rubrum	6.67	Mature	10	Good	Large	High	15
2122	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	25
2123	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
2124	Acer saccharum	16.25	Mature	13	Good	Large	High	20
2125	Acer saccharum	12.5	Mature	10	Fair	Large	Moderate	20
2126	Liriodendron tulipifera	15	Mature	12	Poor	Large	Moderate	15
2127	Acer rubrum	8.67	Mature	13	Good	Large	High	20
2128	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20



TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2129	Acer rubrum	14	Mature	21	Good	Large	High	25	
2130	Acer rubrum	8	Mature	12	Fair	Large	Moderate	15	
2131	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	10	
2132	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
2133	Acer rubrum	8.67	Mature	13	Good	Large	High	25	
2134	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	10	
2135	Acer rubrum	10	Mature	15	Fair	Large	Moderate	25	
2136	Acer rubrum	15.33	Mature	23	Good	Large	High	35	
2137	Acer rubrum	10	Mature	15	Fair	Large	Moderate	25	
2138	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15	
2139	Acer rubrum	7.33	Mature	11	Good	Large	High	20	
2140	Acer rubrum	4	Semi-mature	8	Good	Large	High	10	
2141	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	25	
2142	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	20	
2143	Acer rubrum	4	Semi-mature	8	Fair	Large	Moderate	15	
2144	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
2145	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
2146	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
2147	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15	
2148	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	20	
2149	Liriodendron tulipifera	N/A	Mature	23	Dead	Medium	N/A	0	
2150	Acer rubrum	9.33	Mature	14	Good	Large	High	20	
2151	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20	
2152	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	15	
2153	Liriodendron tulipifera	16.25	Mature	13	Poor	Large	Moderate	15	
2154	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20	
2155	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2156	Liriodendron tulipifera	27.5	Mature	22	Poor	Large	Moderate	30	
2157	Robinia pseudoacacia	14	Mature	14	Fair	Large	Moderate	20	
2158	Robinia pseudoacacia	13	Mature	13	Fair	Large	Moderate	20	
2159	Robinia pseudoacacia	6	Semi-mature	9	Good	Large	High	10	
2160	Robinia pseudoacacia	12	Mature	12	Fair	Large	Moderate	20	
2161	Robinia pseudoacacia	12	Mature	12	Fair	Large	Moderate	20	
2162	Acer saccharum	12.5	Mature	10	Good	Large	High	20	
2163	Prunus serotina	12	Mature	12	Fair	Large	Moderate	15	
2164	Acer rubrum	4.5	Semi-mature	9	Poor	Large	Low	15	
2165	Robinia pseudoacacia	17	Mature	17	Fair	Large	Moderate	20	
2166	Acer rubrum	13.33	Mature	20	Good	Large	High	30	
2167	Acer rubrum	8.67	Mature	13	Good	Large	High	20	
2168	Acer rubrum	12	Mature	18	Good	Large	High	20	
2169	Robinia pseudoacacia	10	Mature	10	Fair	Large	Moderate	15	
2170	Liriodendron tulipifera	30	Mature	24	Poor	Large	Moderate	30	
2171	Liriodendron tulipifera	32.5	Mature	26	Poor	Large	Moderate	35	
2172	Liriodendron tulipifera	23.75	Mature	19	Poor	Large	Moderate	30	
2173	Robinia pseudoacacia	6	Semi-mature	9	Fair	Large	Moderate	15	
2174	Acer rubrum	6.67	Mature	10	Good	Large	High	15	
2175	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2176	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	20
2177	Robinia pseudoacacia	6	Semi- mature	9	Fair	Large	Moderate	15
2178	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	15
2179	Robinia pseudoacacia	6	Semi- mature	9	Fair	Large	Moderate	10
2180	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	15
2181	Liriodendron tulipifera	22.5	Mature	18	Poor	Large	Moderate	30
2182	Acer rubrum	6.67	Mature	10	Fair	Large	Moderate	15
2183	Liriodendron tulipifera	25	Mature	20	Poor	Large	Moderate	25
2184	Liriodendron tulipifera	12.5	Mature	10	Poor	Large	Moderate	10
2185	Liriodendron tulipifera	23.75	Mature	19	Poor	Large	Moderate	25
2186	Acer rubrum	4	Semi- mature	8	Good	Large	High	10
2187	Liriodendron tulipifera	17.5	Mature	14	Poor	Large	Moderate	25
2188	Acer rubrum	4.5	Semi- mature	9	Good	Large	High	15
2189	Acer rubrum	4.5	Semi- mature	9	Good	Large	High	15
2190	Liriodendron tulipifera	30	Mature	24	Poor	Large	Moderate	30
2191	Robinia pseudoacacia	15	Mature	15	Poor	Large	Low	20
2192	Robinia pseudoacacia	6	Semi- mature	9	Fair	Large	Moderate	20
2193	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2194	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	20
2195	Robinia pseudoacacia	10	Mature	10	Poor	Large	Low	15
2196	Liriodendron tulipifera	26.25	Mature	21	Poor	Large	Moderate	35
2197	Acer rubrum	8	Mature	12	Fair	Large	Moderate	20
2198	Robinia pseudoacacia	13	Mature	13	Poor	Large	Low	15
2199	Liriodendron tulipifera	27.5	Mature	22	Poor	Large	Moderate	30
2200	Acer rubrum	4.5	Semi-mature	9	Good	Large	High	15
2201	Acer rubrum	12.67	Mature	19	Fair	Large	Moderate	25
2202	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
2203	Acer rubrum	7.33	Mature	11	Fair	Large	Moderate	20
2204	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	10
2205	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
2206	Acer saccharum	9	Semi-mature	9	Good	Large	High	20
2207	Acer rubrum	7.33	Mature	11	Fair	Medium	Moderate	15
2208	Liriodendron tulipifera	31.25	Mature	25	Poor	Large	Moderate	30
2209	Acer rubrum	4.5	Semi-mature	9	Fair	Large	Moderate	15
2210	Liriodendron tulipifera	13.75	Mature	11	Poor	Large	Moderate	15
2211	Liriodendron tulipifera	25	Mature	20	Poor	Large	Moderate	35
2212	Acer saccharum	9	Semi-mature	9	Good	Large	High	20
2213	Liriodendron tulipifera	26.25	Mature	21	Poor	Large	Moderate	30

TreeID	Host ID	TPZ_Radius_ft	AgeClass		ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2214	Liriodendron tulipifera	26.25	Mature	21	Poor	Large	Moderate	35	
2215	Juglans nigra	8	Semi-mature	8	Fair	Medium	Low	10	
2216	Juglans nigra	8	Semi-mature	8	Fair	Medium	Low	15	
2217	Juglans nigra	8	Semi-mature	8	Good	Medium	Moderate	15	
2218	Platanus occidentalis	8	Mature	12	Good	Large	High	20	
2219	Acer saccharum	12.5	Mature	10	Good	Large	High	20	
2220	Sassafras albidum	12.67	Mature	19	Fair	Large	Moderate	20	
2221	Liriodendron tulipifera	N/A	Mature	21	Dead	Large	N/A	15	
2222	Acer rubrum	4	Semi-mature	8	Poor	Large	Low	15	
2223	Robinia pseudoacacia	5.33	Semi-mature	8	Poor	Large	Low	10	
2224	Robinia pseudoacacia	13	Mature	13	Fair	Large	Moderate	20	
2225	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	15	
2226	Robinia pseudoacacia	13	Mature	13	Fair	Large	Moderate	20	
2227	Acer saccharum	16.25	Mature	13	Good	Large	High	20	
2228	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	20	
2229	Acer rubrum	13.33	Mature	20	Fair	Large	Moderate	25	
2230	Acer rubrum	8.67	Mature	13	Fair	Large	Moderate	15	
2231	Robinia pseudoacacia	12	Mature	12	Fair	Large	Moderate	15	
2232	Robinia pseudoacacia	13	Mature	13	Fair	Large	Moderate	20	
2233	Robinia pseudoacacia	10	Mature	10	Fair	Large	Moderate	15	

TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2234	Robinia pseudoacacia	12	Mature	12	Fair	Large	Moderate	20
2235	Acer saccharum	13.75	Mature	11	Good	Large	High	20
2236	Robinia pseudoacacia	10	Mature	10	Fair	Large	Moderate	15
2237	Robinia pseudoacacia	6	Semi-mature	9	Fair	Large	Moderate	15
2238	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	15
2239	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	25
2240	Robinia pseudoacacia	16	Mature	16	Fair	Large	Moderate	20
2241	Robinia pseudoacacia	16	Mature	16	Fair	Large	Moderate	30
2242	Robinia pseudoacacia	11	Mature	11	Fair	Large	Moderate	15
2243	Robinia pseudoacacia	N/A	Semi-mature	8	Dead	Large	N/A	0
2244	Robinia pseudoacacia	13	Mature	13	Fair	Large	Moderate	15
2245	Robinia pseudoacacia	18	Mature	18	Fair	Large	Moderate	25
2246	Acer rubrum	10.67	Mature	16	Fair	Large	Moderate	20
2247	Robinia pseudoacacia	6	Semi-mature	9	Fair	Large	Moderate	20
2248	Ulmus americana	11.33	Mature	17	Fair	Large	Moderate	25
2249	Acer rubrum	8	Mature	12	Fair	Large	Moderate	25
2250	Acer rubrum	10	Mature	15	Fair	Large	Moderate	20
2251	Acer rubrum	6.02	Semi-mature	9, 8	Fair	Large	Moderate	20
2252	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
2253	Acer rubrum	9.33	Mature	14	Fair	Large	Moderate	20
2254	Robinia pseudoacacia	6	Semi-mature	9	Fair	Large	Moderate	20



TreeID	Host ID	TPZ_Radius_ft	AgeClass	ConditionClass	HeightClass	SuitabilityPres	CanopyRadius	Wetland
2255	Acer rubrum	4	Semi-mature	8	Good	Large	High	15
2256	Quercus bicolor	20	Mature	30	Fair	Large	Moderate	40
2257	Liriodendron tulipifera	17.5	Mature	14	Poor	Large	Moderate	25
2258	Acer rubrum	16	Mature	24	Fair	Large	Moderate	25
2259	Sassafras albidum	4	Semi-mature	8	Fair	Medium	Moderate	15
2260	Sassafras albidum	4.5	Semi-mature	9	Poor	Medium	Low	10
2261	Sassafras albidum	6.67	Mature	10	Good	Medium	High	15
2262	Liriodendron tulipifera	45	Mature	36	Poor	Large	Low	15
2263	Acer rubrum	6.67	Mature	10	Poor	Large	Low	15
2264	Acer rubrum	32	Mature	48	Poor	Large	Low	40
2265	Juglans nigra	8	Semi-mature	8	Good	Medium	Moderate	10
2266	Robinia pseudoacacia	6	Semi-mature	9	Good	Medium	High	15
2267	Robinia pseudoacacia	5.33	Semi-mature	8	Good	Medium	High	10
2268	Acer rubrum	12	Mature	18	Poor	Medium	Low	10

**ATTACHMENT H**

**AESTHETIC RESOURCE ANALYSIS**

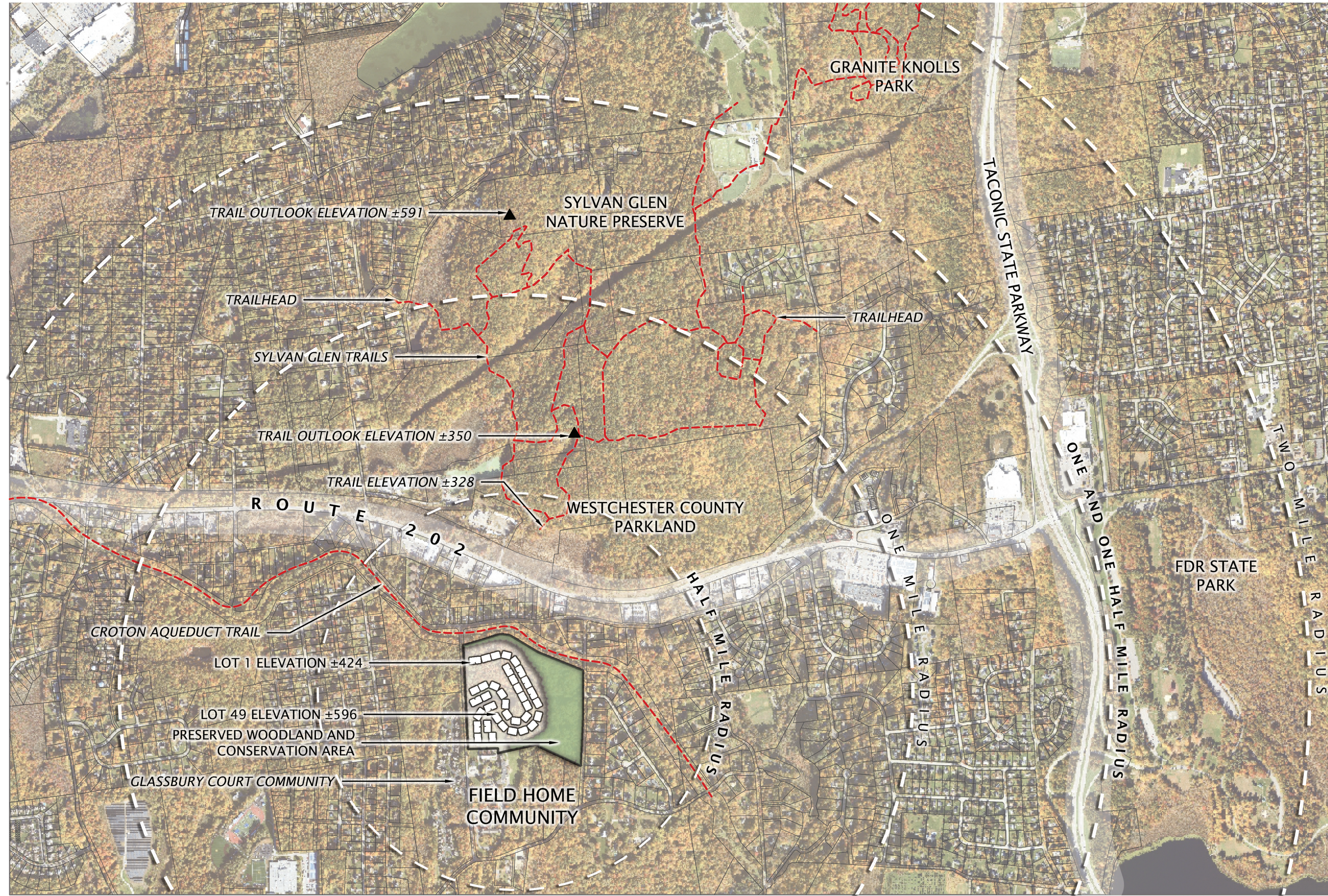
# FIELD HOME

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YORKTOWN, WESTCHESTER COUNTY, NEW YORK



# COMMUNITY EXHIBIT | CONTEXT MAP



- **+/- 14.3 ACRES**  
CONSERVATION AREA AND ADDITIONALLY PRESERVED WOODLANDS TO AID IN MITIGATING VIEWSHED IMPACTS
- SITE SEPARATED FROM SYLVAN GLEN NATURE PRESERVE BY ROUTE 202 COMMERCIAL CORRIDOR
- EXISTING VIEWSHEDS FROM SYLVAN GLEN NATURE PRESERVE ALREADY INCLUDE COMMERCIAL AND RESIDENTIAL DEVELOPMENT

CONTEXT MAP

SCALE: 1" = 600'

**FIELD HOME**  
YORKTOWN, WESTCHESTER COUNTY, NEW YORK

**Toll Brothers**  
AMERICA'S LUXURY HOME BUILDER  
**ESE CONSULTANTS**

ARTIST'S ANIMATION/RENDERING DEPICTS GENERAL CONCEPT AND DESIGN FOR COMMUNITY LAYOUT. FEATURES AND FINISHES SUBJECT TO REVISION. BUILDING RENDERINGS ARE FOR ILLUSTRATIVE PURPOSES ONLY AND SHOULD NOT BE RELIED UPON FOR ACTUAL DESIGN OR LAYOUT.



# COMMUNITY EXHIBIT | SWM BUFFER PLANTING SPECIES

## DECIDUOUS TREES



*'COMMEMORATION' SUGAR MAPLE  
ACER SACCHARUM 'COMMEMORATION'*



*BURR OAK  
QUERCUS MACROCARPA*

## UNDERSTORY TREES



*CANADIAN SERVICEBERRY  
AMELANCHIER CANADENSIS*



*'STELLAR PINK' DOGWOOD  
CORNUS X RUTGAN*

## EVERGREEN TREES



*'DARK GREEN' ARBORVITAE  
THUJA OCCIDENTALIS 'DARK GREEN'*



*EASTERN REDCEDAR  
JUNIPERUS VIRGINIANA*



*NORWAY SPRUCE  
PICEA ABIES*

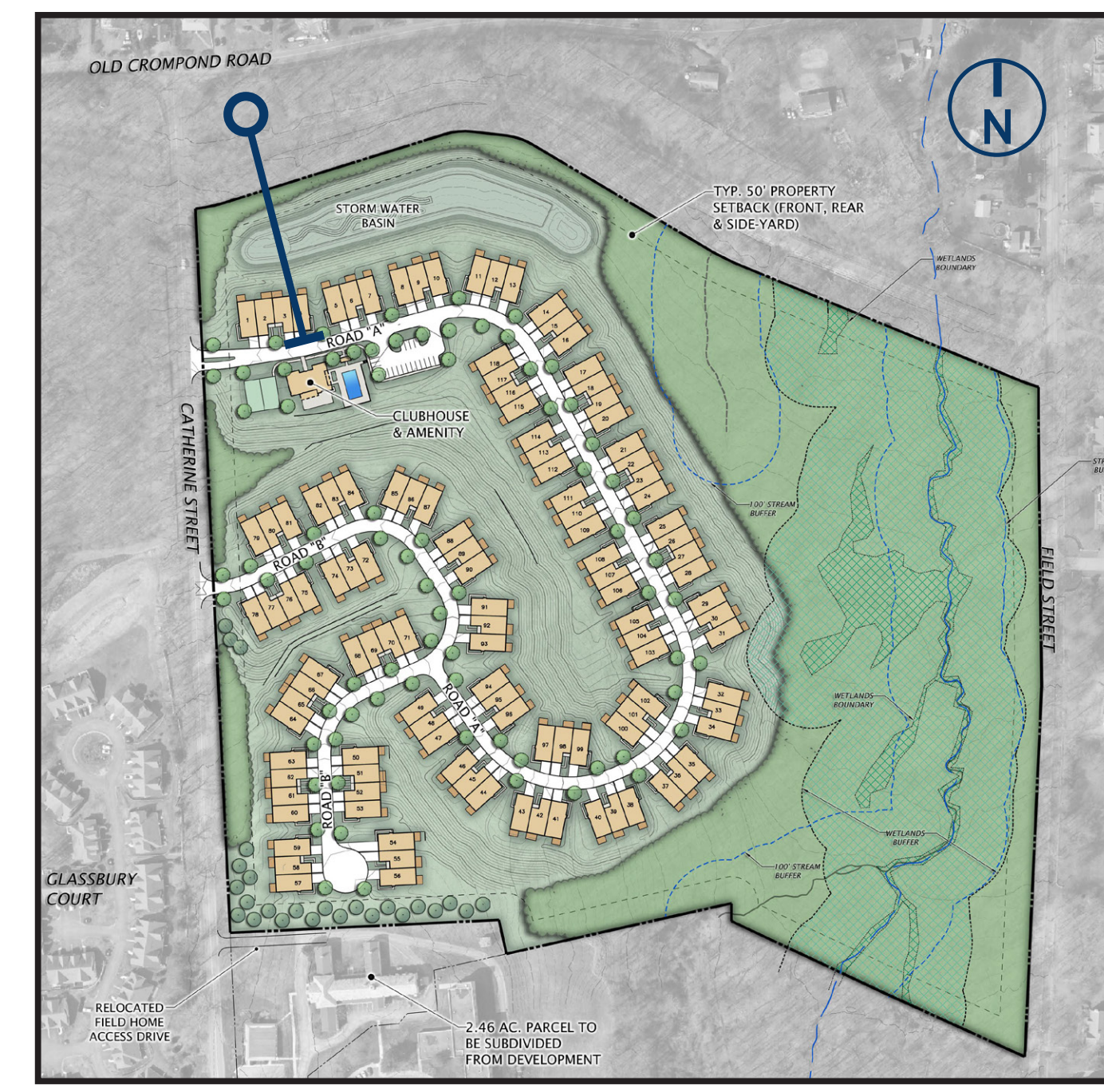


*WHITE FIR  
ABIRE CONCOLOR*

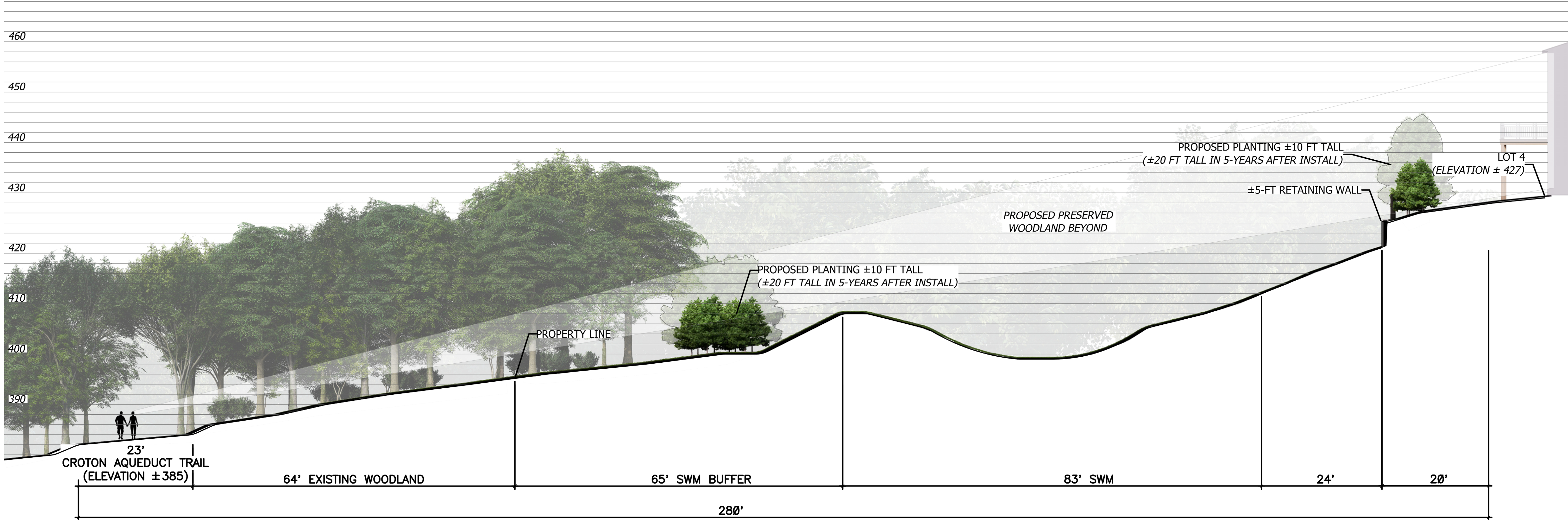


# COMMUNITY EXHIBIT | SITE SECTION 1

- OVER +/-40 FT OF ELEVATION CHANGE FROM THE CROTON AQUEDUCT TRAIL TO PROPOSED HOMES ON THE LOWEST LEVEL OF THE SITE
- PROPOSED QUICK GROWING EVERGREEN SPECIES WILL BUFFER THE BASIN AREA IN A FEW YEARS



KEY MAP | NTS



SITE SECTION 1

SCALE: 1" = 10'

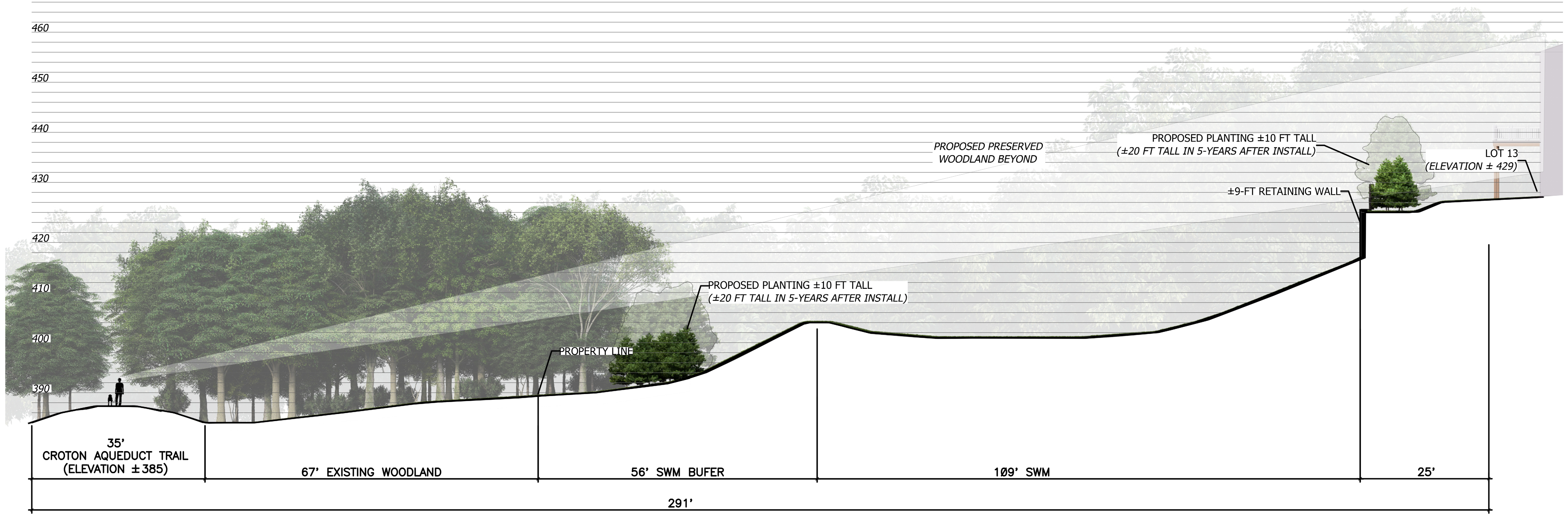


# COMMUNITY EXHIBIT | SITE SECTION 2

- OVER +/-40 FT OF ELEVATION CHANGE FROM THE CROTON AQUEDUCT TRAIL TO PROPOSED HOMES
- EXISTING WOODLAND AREA INCREASES FURTHER INTO PROPOSED COMMUNITY



KEY MAP | NTS



SITE SECTION 2  
SCALE: 1" = 10'



**ATTACHMENT I**

**NEW YORK STATE OFFICE OF PARKS, RECREATION &  
HISTORIC PRESERVATION (NYS-OPRHP) CORRESPONDENCE**

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**HISTORICAL ANALYSIS, CONDITIONS & ADAPTIVE REUSE,  
PREPARED BY STEPHEN TILLY, ARCHITECT, DATED  
AUGUST 20, 2023**



**New York State  
Parks, Recreation and  
Historic Preservation**

**KATHY HOCHUL**  
Governor

**ERIK KULLESEID**  
Commissioner

October 28, 2022

Anthony Russo  
President  
Environmental Compliance  
35 Roosevelt Avenue  
Middletown, NY 10940

Re: SEQRA  
Field Home - Active Adult Residential Development  
2300 Catherine St, Cortlandt Manor, NY 10567  
22PR07787

Dear Anthony Russo:

Thank you for requesting the comments of the Office of Parks, Recreation and Historic Preservation (OPRHP). We have reviewed the project in accordance with the New York State Historic Preservation Act of 1980 (Section 14.09 of the New York Parks, Recreation and Historic Preservation Law). These comments are those of the OPRHP and relate only to Historic/Cultural resources. They do not include potential environmental impacts to New York State Parkland that may be involved in or near your project. Such impacts must be considered as part of the environmental review of the project pursuant to the State Environmental Quality Review Act (New York Environmental Conservation Law Article 8) and its implementing regulations (6 NYCRR Part 617).

Based upon this review, it is the opinion of OPRHP that no properties, including archaeological and/or historic resources, listed in or eligible for the New York State and National Registers of Historic Places will be impacted by this project.

If further correspondence is required regarding this project, please be sure to refer to the OPRHP Project Review (PR) number noted above.

Sincerely,

R. Daniel Mackay

Deputy Commissioner for Historic Preservation  
Division for Historic Preservation

rev: J. Betsworth

# FIELD HOME

YORKTOWN, NEW YORK



## REPORTS: HISTORIC ANALYSIS, CONDITIONS & ADAPTIVE REUSE

Prepared for Toll Brothers, Inc.  
42 Old Ridgebury Road, Danbury, Connecticut 06810

August 30, 2023

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# Introduction

In early July of 2023 Stephen Tilly, Architect was engaged by Toll Brothers, Inc. to prepare historic analysis, conditions, and adaptive reuse reports of the Field Home located at 2302 Catherine Street, Yorktown, New York.

The primary field investigation took place on Thursday, July 13th from 10:00 am until approximately 12:30 pm. The summer day was primarily sunny and humid with temperatures in the low eighties (Fahrenheit) in the morning. Stephen Tilly, Architect (STA) was represented by Stephen Tilly, Principal; Stephanie Reinert, Historic Preservation Director; and Kevin Batternay, Architectural Designer. Kevney Moses of Toll Brothers, Inc. accompanied the team throughout the building. Additionally, John R. Ahearn of Field Hall Foundation met with the STA team prior to and after the investigation, and provided additional insights on the building and recent engineer's notes. Patti Lavan Horvath, Field Hall Foundation, also provided assistance during the investigation.

Stephanie Reinert and Kevin Batternay revisited the site and building on Thursday, August 10th from 9:00 am until approximately 11:30 am to review conditions in the basement and take some additional photographs. This summer day was cloudy with temperatures in the low seventies (Fahrenheit) in the morning. John R. Ahearn and Patti Lavan Horvath again met with the STA team and provided assistance.

Our assessment included visual, non-destructive observation of the exterior and interior of the building and site, accompanied by taking digital photographs and making field notes and sketches.

The complete scope of services includes the following:

1. Field Investigation
  - a. A site visit to observe and document existing conditions of the building and site.
  - b. Field notes, digital photographs, and diagrammatic sketches.
2. Concept Site Plan  
Plans identifying potential parking improvements, pathways, and entry/egress points that might possibly provide ADA-accessible circulation.
3. Written Reports
  - a. Historic Analysis
  - b. Conditions Report
  - c. Adaptive Reuse Report
4. Presentation to Town of Yorktown/Toll Brothers Inc.

Note: Photographs included as part of the Architectural Observations were taken by Stephen Tilly, Architect during the site visits on July 13<sup>th</sup> and August 10<sup>th</sup>, 2023.

# Executive Summary

The Field Home, located at 2302 Catherine Road, is a stately presence viewed from the public way in the Town of Yorktown, constructed by a prominent philanthropist and businessman to serve his family and the surrounding community. The Field family name is memorialized on several buildings and spaces in upper Westchester County; in this case, both Field Home and Field Library in nearby Peekskill were founded by the same member of the family, Cortlandt dePeyster Field, who also paid tribute to his mother by naming Catherine Street after her.

The building is not currently listed in the National or New York State Registers of Historic Places, nor is it identified as a local landmark. However, a 2006 *Town of Yorktown Reconnaissance-Level Historic Resource Survey* for the Town of Yorktown Landmarks Preservation Commission did identify it as a historic building worthy of consideration for these listings.

While elements of the building show signs of wear and deterioration after a century of life, and repairs are indeed needed, all portions of the building are solidly constructed of unreinforced concrete accompanied by wood and steel structural components. The original exterior materials and the overall design of the building are timeless, whether reflecting the vernacular or agricultural massing of the earlier sections to the east or exemplifying the classical Greek tradition on the 1924 addition that completed the building as we recognize today.

Building reuse is an environmentally friendly activity. Reuse scenarios at this location, somewhat remote from Town centers or commercial concentration, are limited in number. The building itself does not mandate partial or wholesale demolition. Operating costs for reuse should be carefully evaluated; they are likely to be roughly, but not perfectly, linear to square footage.

We have provided architectural observations, summarized existing conditions, and provided recommendations to assist in restoring and rehabilitating the historical building for any of the alternate uses or forms, as it is not expected to return to use as a residence for the elderly. We have included three options, each with different functions and associated sizes of the building and parking area. These options grow initially out of analysis of what uses the building would support rather than a specific ownership scenario. That said, ownership could be by the Town or perhaps a lessee, the spaces and functions can be accommodated within the structural system and exterior envelope of the existing building or portions thereof, and the uses are intended to continue the tradition of supporting the residential growth or culture of the local community.

# Historic Analysis

The Field Home as we know it today was constructed during three late-eighteenth and early nineteenth century campaigns, with the most recent addition closest to Catherine Street and providing the familiar face of the building for almost a century. The oldest portion of the building is the Chapel, the section located furthest to the east or back, constructed by Cortlandt dePeyster Field by 1889 on family farm property. The second addition, completed in 1897, maintained the massing and gambrel roofline of the Chapel, added a wrap-around porch along the new section that jutted forth to the street, and significantly increased the number of residential rooms. The grand, symmetrical Greek temple front with pavilions to each side (as well as a third to the northeast), was added in 1924.

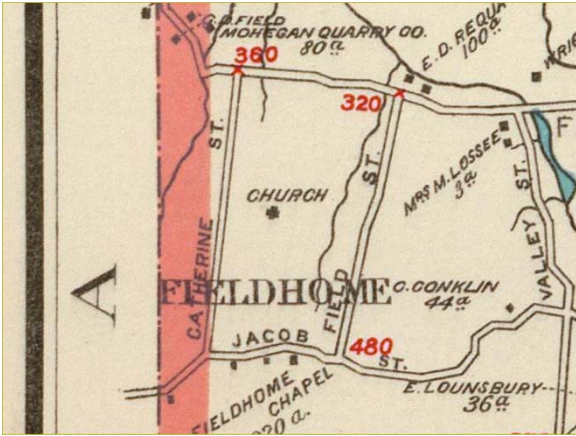
Cortlandt and his father incorporated the Field Home by Special Act of the New York State Legislature as a home for the respectable poor and his poorer relatives. It was initially used for summer retreats by episcopal missionaries and priests before becoming a year-round home for elderly women. The building has been in operation through several mergers and was last used as a residential home in 1998; it is currently used as offices for the Field Hall Foundation.

Our team sought information from numerous sources including the New York Public Library, Library of Congress, and Westchester County Archives, but had the most success obtaining information from local sources. Field Horne, a descendant of the family and board member of Field Hall Foundation, published a very informative article in the Summer 2004 edition of *The Westchester Historian* (Westchester County Historical Society). In this article he noted the absence of personal or family papers, which we found to be accurate. The Field Library in Peekskill (endowed by the same Cortlandt dePeyster Field in 1887) holds the Field Home papers in their local collection; the librarian, however, informed us the whereabouts of most of the papers was unknown due to a mold/restructuring issue, and was able to provide only some obituaries and newspaper articles written since 1977. Additional sources of information include maps and atlases from the David Rumsey Historical Map Collection, Westchester County Archives, and photographs from the Field Hall Foundation and books. A family portrait entitled “The Field Family in a Garden,” painted by Daniel Huntington in 1869, is housed in the Smithsonian American Art Museum; Cortlandt dePeyster Field, his wife, sister, father (Benjamin Hazard Field, also a philanthropist) and mother (Catherine Van Cortlandt dePeyster) are shown.

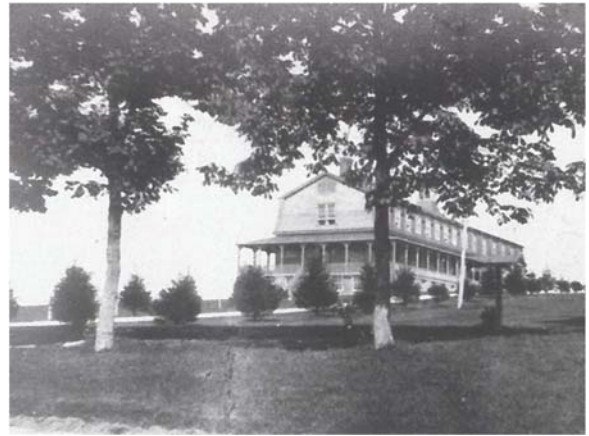
Larson Fisher Associates completed the *Town of Yorktown Reconnaissance-Level Historic Resource Survey* for the Town of Yorktown Landmarks Preservation Commission in 2006. At that time the preservation consultant identified “90 notable properties that should receive additional documentation and be considered for listing for local and/or National Register designation,” of which Field Home was one. The survey identified Field Home as a “notable example of architecture” primarily for its classical Greek temple façade and categorized the overall integrity as “intact.” As few changes beyond system improvements have been made to the building since 2006 and the Field family name continues to be well-known throughout upper Westchester County and New York City history, this determination is likely to remain.



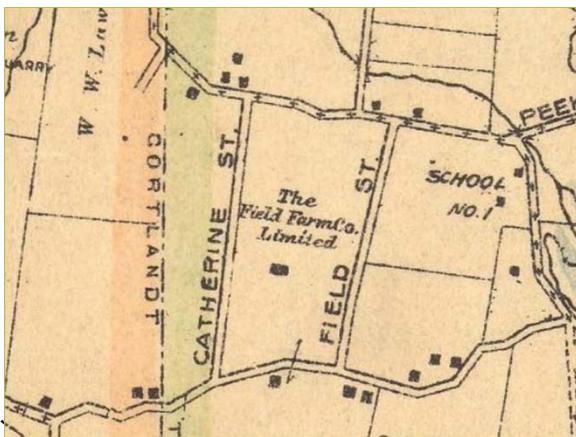
# Historic Maps and Images



1893 (Bien Atlas) - Town of Yorktown  
Image: David Rumsey Map Collection



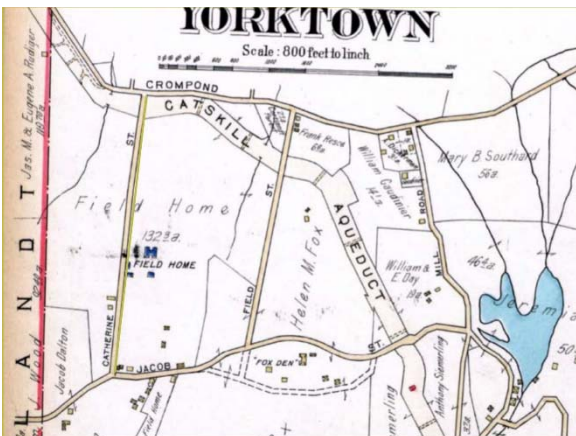
Prior to 1906, West Elevation (1897 addition and Chapel)  
Image: L. G. Cooper et al, *Postcard History Series - Yorktown*



1908 (Hyde Atlas) - 15 Atlas of the rural country district north of New York City...  
Image: David Rumsey Map Collection



1920s, South Elevation (1897 addition and Chapel)  
Image: L. G. Cooper et al, *Postcard History Series - Yorktown*



1930 (Hopkins Atlas) - Yorktown (Town), Westchester County  
Image: Westchester County Archives Digital Collections



1980s, West Elevation (1924 addition)  
Image: L. G. Cooper et al, *Postcard History Series - Yorktown*

## Existing Conditions

Field Home was built by a prominent regional businessman and philanthropist with the intent of serving his religious community and family for decades to come: the choice of traditional, long-lasting materials such as slate, sheet metal, and concrete accompanied by good quality construction remains evident over a century later despite the need for some repairs.

All three sections of the building are constructed with unreinforced poured concrete exterior and bearing walls, ranging from 10" to 24" thick at the foundation. The structural system includes both wood and steel beams, as well as vertical tie bolts, depending upon the era of construction. Interior partition walls and furring on the perimeter walls is comprised of wood 2x4s with either wood or wire lath securing the plaster.

Most of the roofs of the building appear to be the original/early slate or standing seam sheet metal, but some have been replaced with asphalt shingles. Portions of the slate roofs may be able to be repaired or reinstalled to serve the building for another twenty-five to fifty years, but slates are shifting out of course and the roofs may be nearing the end of their material life. The standing seam roofs appear to have been repaired and are nearing or already past the end of their material life.

Most windows are replacements and appear to be in fair condition, although several are in disrepair. The doors typically appear to be in good to fair condition. Exterior trim is in fair to poor condition, with many areas such as the pediment of the West Elevation, columns, volutes, and the cupola not protected by paint and/or in need of reattachment or repair.

Building systems appear to be appropriate with several upgraded in the late eighties or nineties, and a new boiler installed just last year. Peeling paint on surfaces around some of the steam radiators suggests some individual components may not be operating properly.

Asbestos-containing materials have been identified in the building, including interior plaster in limited locations, tar, and tile or sheet flooring. Additionally, due to the age of the building, lead-containing paint is also assumed to be present.

Although the building is sited on a hilltop, the Basement is at least partially below grade on the later additions, and almost fully below grade beneath the original Chapel. In addition to gutters and downspouts, drainage paths exist to direct stormwater away from the building (i.e. trenches along the North and South Elevations). However, they appear to have failed or were overwhelmed and interior finishes in the Basement are compromised in several locations. Extant trees or those since removed may also have contributed to this issue.

# Recommendations

1. Hazardous Materials: Asbestos-containing materials have been identified in the 2022 Quest report (i.e. tar, plaster, tile/sheet flooring). Considering the dates of construction for the building, lead-containing paint is also assumed to be present. Construction and demolition work, and related materials disposal, will need to be conducted in compliance with EPA, HUD, OSHA, NYS, and any other applicable federal, state, and local regulations with any adaptive reuse option.
2. Roofs: The standing seam metal roofs have typically reached the end of their useful material life, and the slate roofs should be investigated further by professional slaters to determine if they can be repaired or reused in select locations. Roofs may need to be replaced in any of the Adaptive Reuse options, preferably matching the original slate and standing seam materials, pattern, and detail. Asphalt shingle roofs may be an option to consider. Additionally, all gutters, downspouts, and the drainage system of the house should be investigated, repaired, and replaced accordingly.
4. Structure: The structural system appears to be generally sound, with specific locations or conditions requiring appropriate treatment or reinforcement, as identified by a structural engineer (i.e. settlement cracks in Second Floor rooms where the East Pavilion meets the Chapel massing; cracks between West Elevation windows/doors; exposed rebar at underside of West Portico floor slab; roof framing and vertical tie bolt systems; condition of concrete at foundations where water infiltration has occurred). None of these conditions is critical enough to mandate wholesale demolition. Repairs are part of a list of maintenance items when evaluating future options.
5. Building Systems: All new building systems should be designed and installed to serve the chosen adaptive reuse option. We understand an existing boiler was installed in 2022: this unit could be used in place to provide baseline heating to 60 to 65 degrees, tied to the outdoor temperature. Additionally, heat pumps that can be controlled by the user can also be installed to provide the additional heat required above the baseline, as well as air conditioning.
5. Site: All drainage systems should be investigated, cleaned/repared or replaced, depending upon the findings.
6. Finishes and Trim: These components can be repaired accordingly (patches, Dutchmen, epoxy repairs) then refinished as needed for the reuse option desired. The Chapel and some Basement walls may need to be substantially repaired, and dropped ceilings should be removed to investigate the conditions of the original ceilings that have been covered to determine the most appropriate treatment.

# Adaptive Reuse Options

The Field Home is currently zoned as RSP-3 Age-Oriented Geriatric Community District. In considering options for reuse of the building we understood that the Town of Yorktown may be interested in obtaining and occupying the building, or that they may lease spaces to private entities or potentially re-sell it, and that zoning could be updated accordingly.

As reuse of the existing building will likely include a work area that exceeds 50 percent of the building area, the Classification of Work would be considered an Alteration - Level 3 (Section 604; 2020 edition of the Existing Building Code of New York State). Code Compliance would require meeting Chapter 9 (Alterations - Level 3) and Chapter 10 (Change of Occupancy) as identified in the 2020 edition of the Existing Building Code of New York State.

## Accessibility

The existing building has multiple entrances, including one at grade along the West Elevation that would be considered accessible. Additional entrances around the building require steps up to the first floor or down to the basement, except for the entry to the Chapel along the South Elevation. A lift on the South Elevation appears to provide accessible circulation from the south parking area to the South Porch and First Floor.

## Parking

The primary parking area currently available for the Field Home includes 13 spaces perpendicular to the South Elevation of the building. Approximately 3 additional spaces appear to be available on the opposite side of the driveway, although they also cross the property line. Informal parallel parking along the single-lane driveway is possible but not preferable due to the limited width of the paving.

## Outbuilding and Satellite Parking

In all reuse options we have opted to demolish the small 1980s prefab building and its associated parking lot located in the southwest corner of the property. We have also opted to reconfigure the south driveway entry in order to utilize the existing entry from Catherine Street to this satellite parking lot, with the assumption that the neighboring Yorktown Rehabilitation & Nursing Center will want their own dedicated entry driveway to their site if the use of Field Home changes.



# Adaptive Reuse Option 1



## **“Work / Live Here” Incubator Work / Live Option**

This option includes adaptive reuse of the entire existing building, and provides duplex units and apartments for startups, artists, and light industrial entrepreneurs to work and live. The larger duplex units would allow for workshop/studio space on the ground floor and living space on the upper level. ADA-accessibility would be available for the spaces that can utilize the elevator or have exterior doors to grade. Shared spaces such as a community room and gym provide support areas to the tenants for both aspects of their lives. This option will require the greatest amount of structural treatment and reinforcement as it retains all phases of historic construction, including potentially vulnerable joints/planes where the different structural systems and roofs were connected.

Parking and an accessible entry (including elevator use) is provided along the West Elevation, and the entry door at Basement level continues to provide access from the lot and the front driveway.

This option is comparable to buildings in Westchester County such as Peekskill Artist Lofts.

Similarly, a small hotel serving the neighborhood, perhaps with small meeting or event spaces, could be created with a plan including smaller rooms in lieu of the apartments or duplexes.

## Adaptive Reuse Option 2



### **“Make Here” Mixed Light Industrial / Studio Option**

This option includes demolition of the Chapel, the section of the building furthest to the back and the earliest construction. As the primary mechanical space of the current building is located below the Chapel, new spaces in the Basement will need to be dedicated to serve these functions.

This option prioritizes incubator and independent workplaces. Light industrial workshops in the Basement could take advantage of the larger, open rooms with good-sized windows and exterior access provided at the same level. The upper floors, already broken into double-loaded corridors with windows in virtually each room, lends itself easily to offices or art/craft studios. Additionally, many of the rooms within the Central portion of the building have doors from both the hall to the adjacent rooms, and multiple rooms could be inhabited by the same entity as needed. The rooms of the second floor of the West Addition could also be separated out to provide multiple rooms for a single entity. Additional uses could include a child-care facility, located in an independently accessed section of the building and making use of the enclosed lawn along the north side of the building. Parking and an accessible entry (including elevator use) is provided along the West Elevation.

This option is comparable to other adaptively reused historic buildings in Westchester County such as: The Hat Factory in Peekskill; Hudson River Landing in Dobbs Ferry; and Bridge Street on Hudson in Irvington.

## Adaptive Reuse Option 3



### “Work Here” Office Option

This option retains solely the massing of the West Addition, prominent along Catherine Street, and of the most recent 1924 construction phase and use. As the greater portion of the building will be demolished, including the deeper basement areas, the percentage of site work increases significantly. Conversely, the amount of required structural repairs will be more limited in scope. As in the previous option, new spaces in the Basement will need to be dedicated to serve mechanical functions.

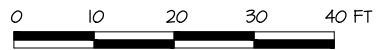
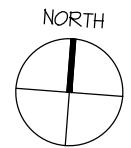
This option prioritizes offices and independent workplaces, and provides a variety of sizes of space to serve different occupants. Additionally, the limited footprint of the building allows for parking to be located behind the building and for the large front lawn to be retained. Recreational lawns or smaller courts for smaller sports could also be located behind the building. Accessible entry to the building is provided primarily via a sloped path along the parking lot to a back porch, with the elevator providing accessible circulation within the building. Additionally, the entry door at Basement level on the West Elevation continues to provide access from the front driveway.

CATHERINE STREET

PROPOSED PARKING AREA  
+/- 40 PARKING SPOTS

PROPOSED  
PROPERTY LINE

YORKTOWN REHABILITATION  
AND NURSING CENTER



2316

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Architect  
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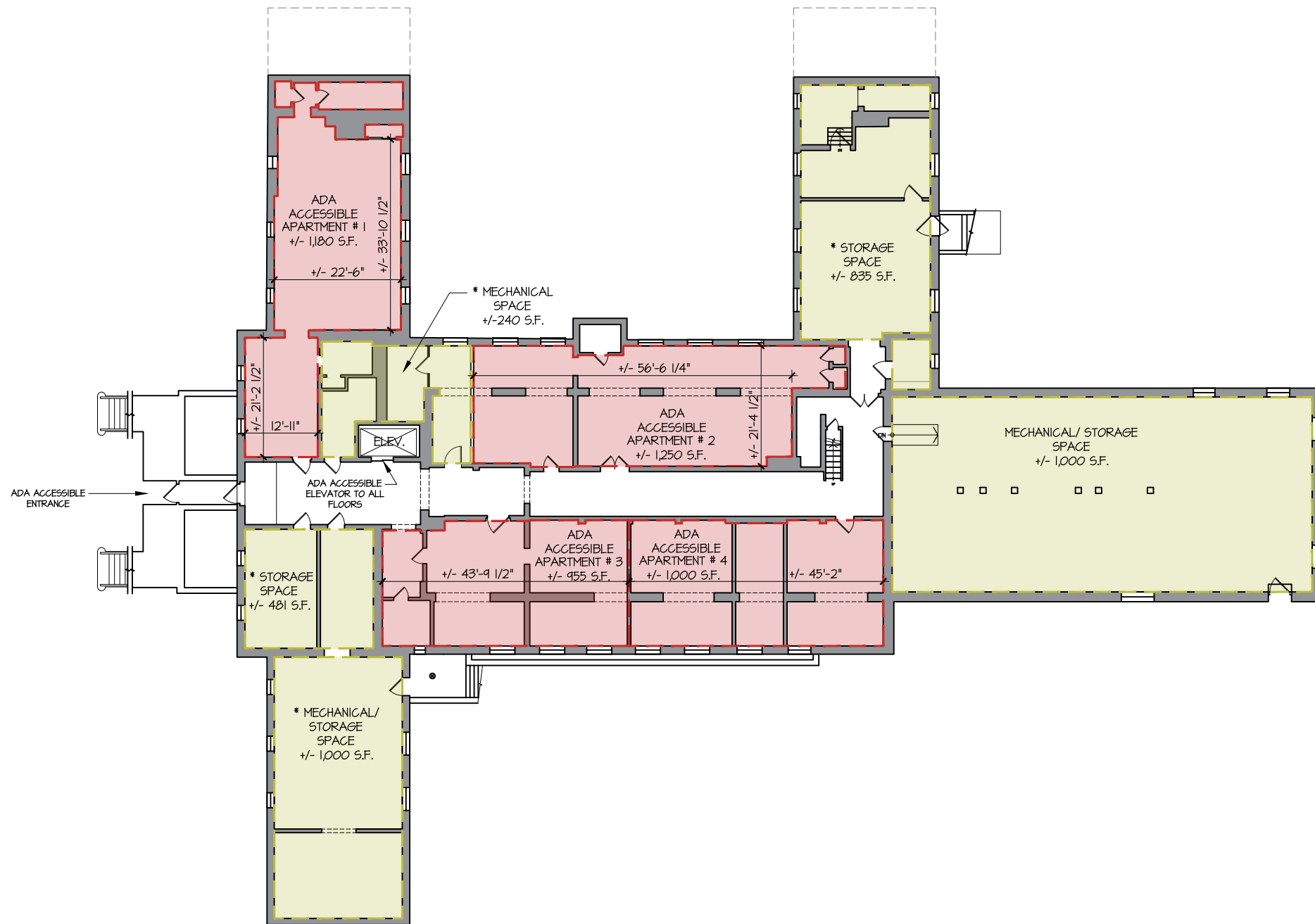
Project: FIELD HOME  
2302 Catherine St, Yorktown, NY 10567

Title: OPTION 1 - "WORK / LIVE HERE" RESIDENTIAL OPTION  
SITE PLAN

Scale: 1/48" = 1'-0" Date: 8/17/2023 Drawn by: kb

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OPTION 1  
**SK-01**

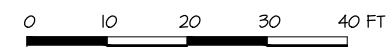


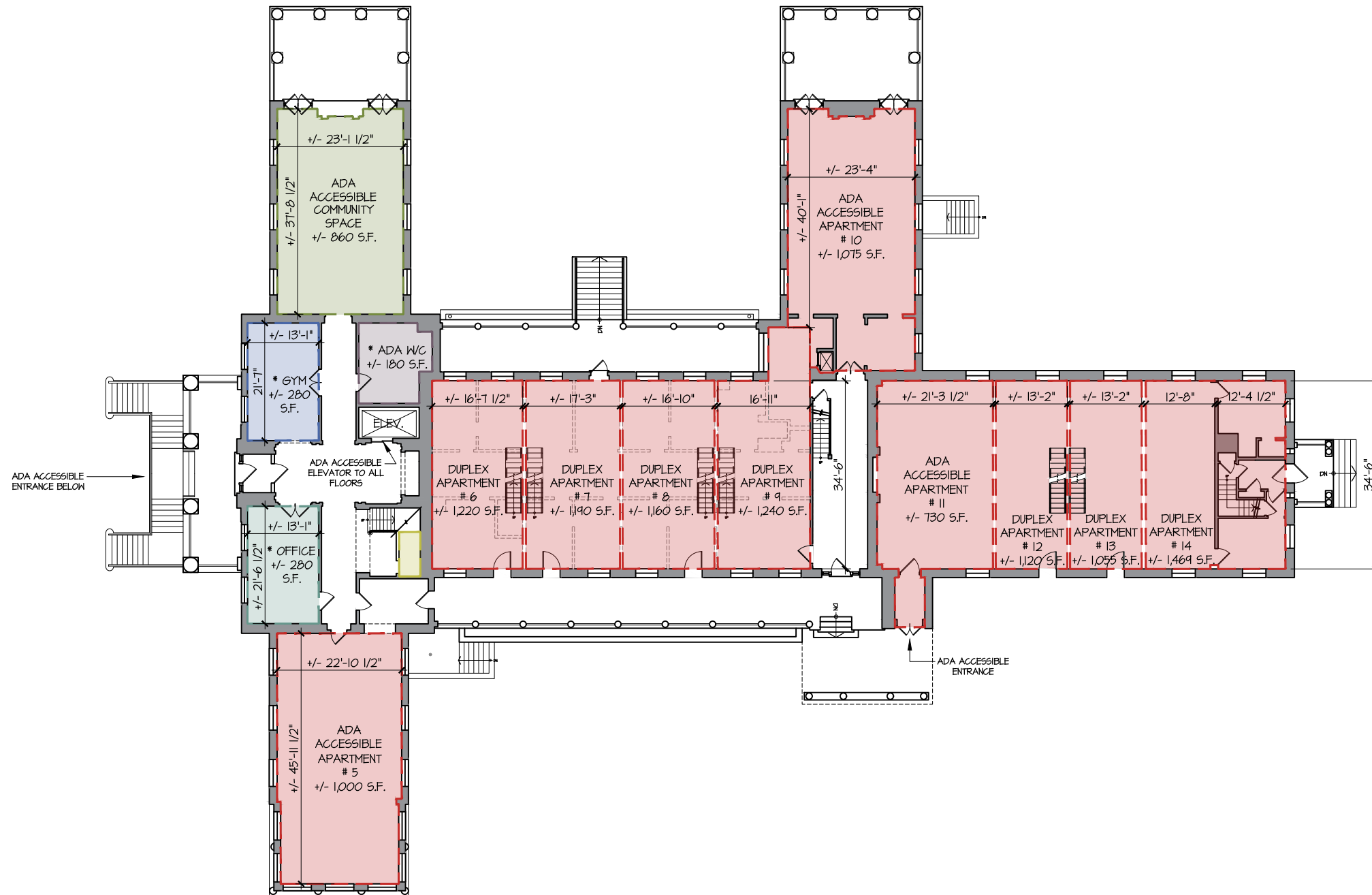


1 OPTION 1 BASEMENT FLOOR PLAN  
SCALE: 1/24" = 1'-0"



SYMBOL LEGEND	
*	ADA ACCESSIBLE SPACE



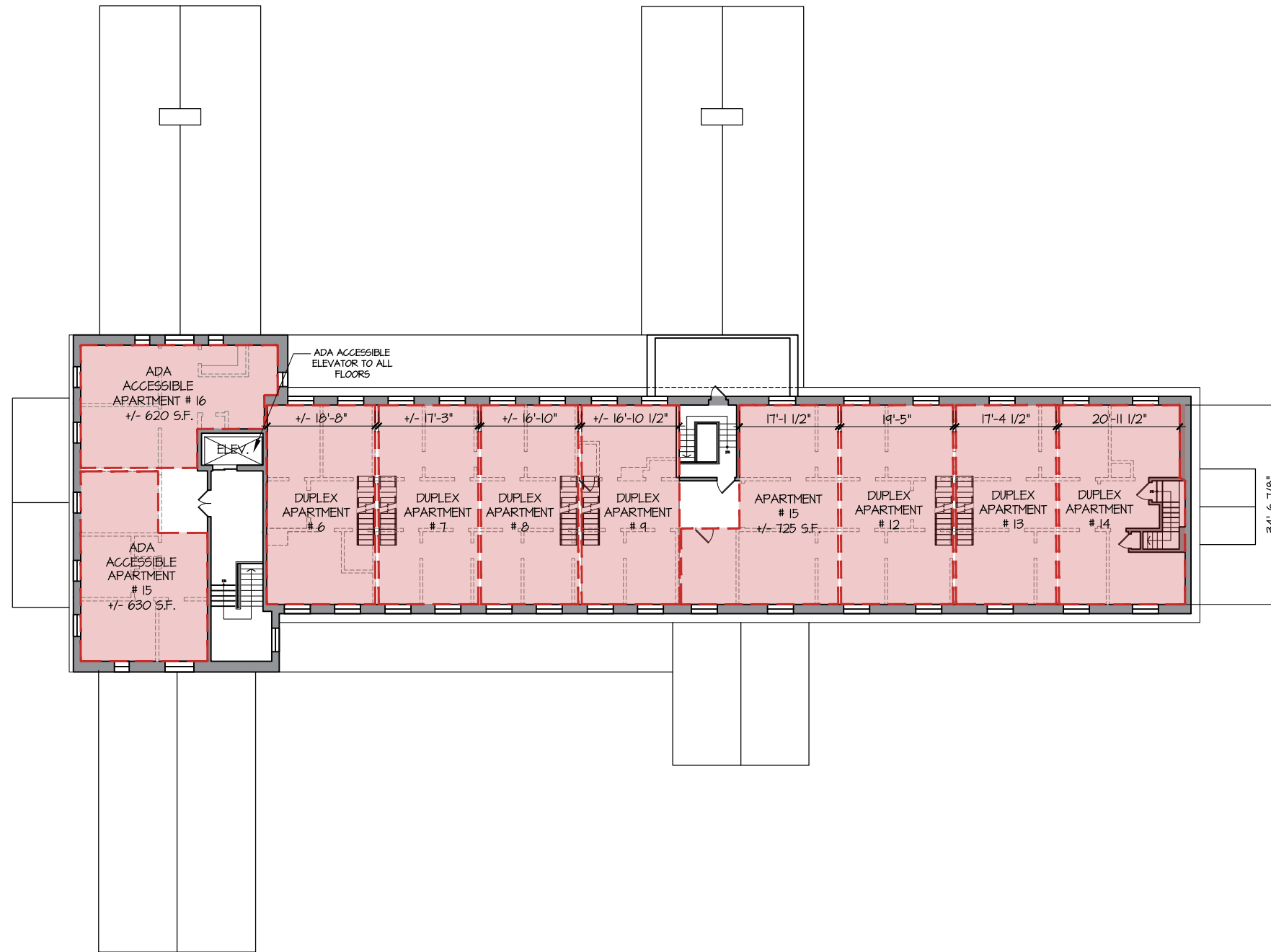


1 OPTION 1 FIRST FLOOR PLAN  
SCALE: 1/24" = 1'-0"



SYMBOL LEGEND	
*	ADA ACCESSIBLE SPACE

0 10 20 30 40 FT



1 OPTION 1 SECOND FLOOR PLAN  
SCALE: 1/24" = 1'-0"



SYMBOL LEGEND	
*	ADA ACCESSIBLE SPACE

0 10 20 30 40 FT

CATHERINE STREET

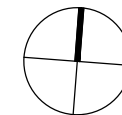
PROPOSED PARKING AREA  
+/- 85 PARKING SPOTS

CHILD CARE  
PLAY AREA

PROPOSED  
PROPERTY LINE

YORKTOWN REHABILITATION  
AND NURSING CENTER

NORTH



0 10 20 30 40 FT

2316

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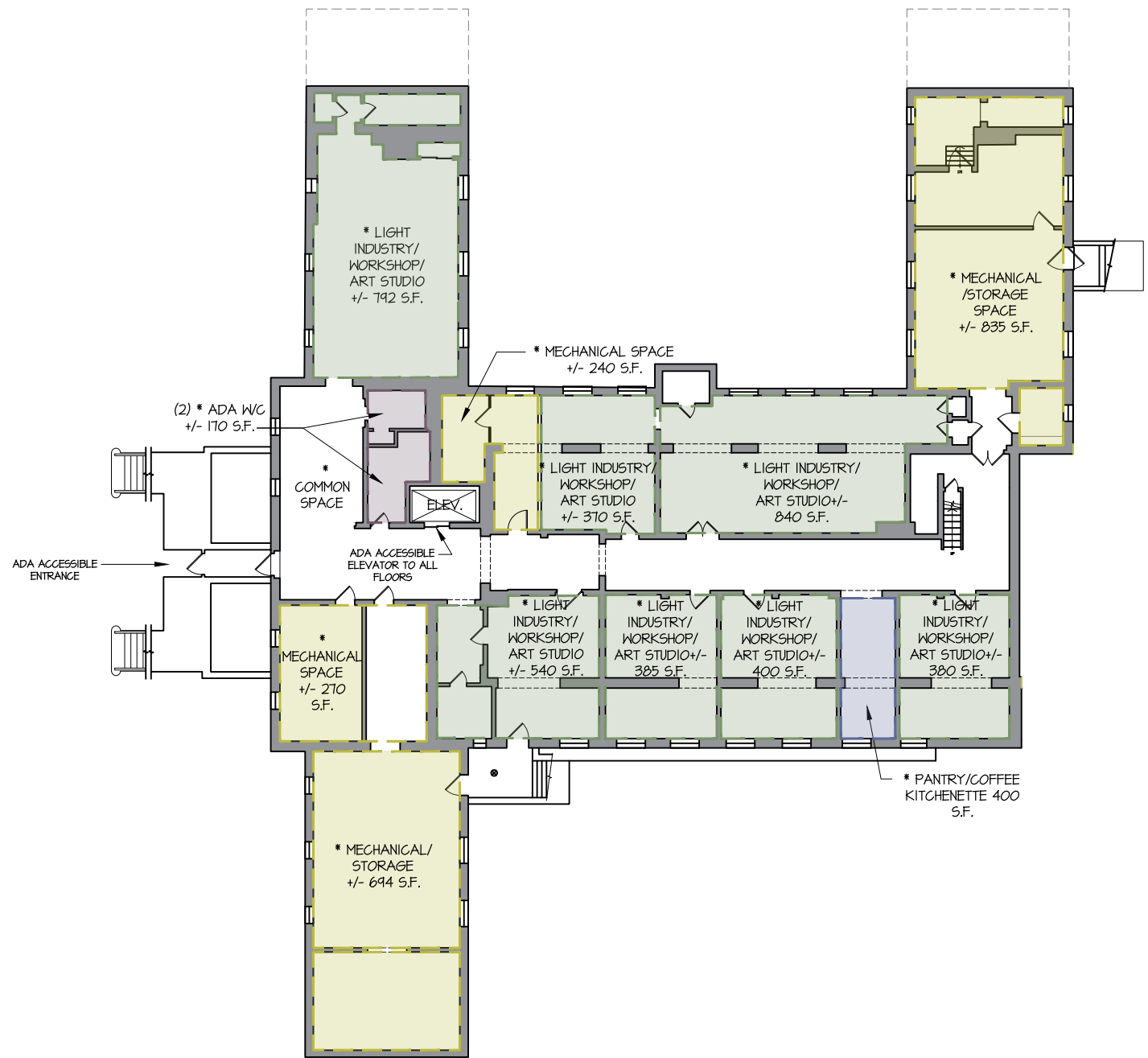
Project: FIELD HOME  
2302 Catherine St, Yorktown, NY 10567

Title: OPTION 2 - "MAKE HERE" MIXED LIGHT INDUSTRIAL / STUDIOS OPTION  
SITE PLAN

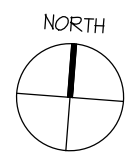
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**SK-01**



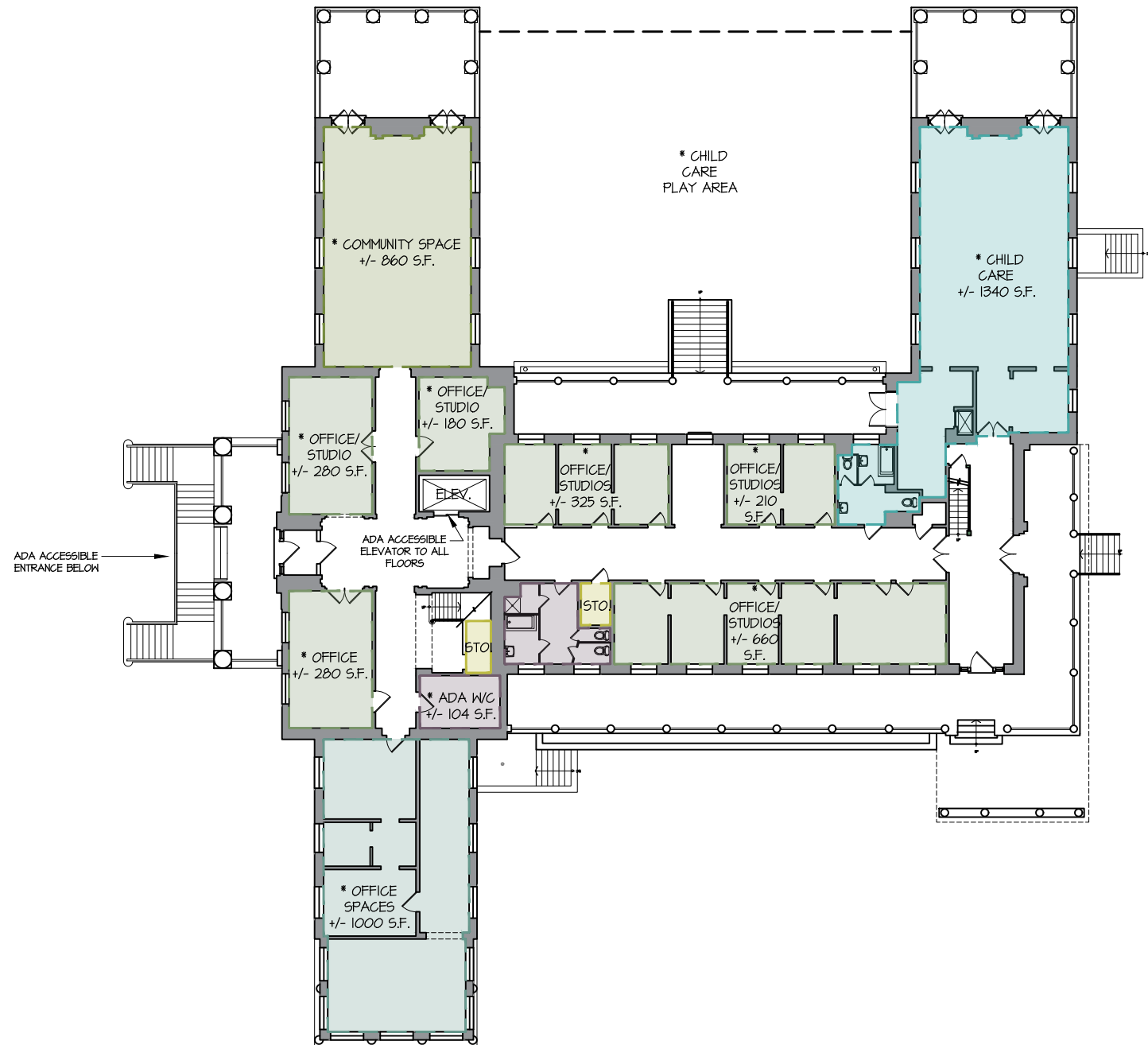


1 OPTION 2 BASEMENT FLOOR PLAN  
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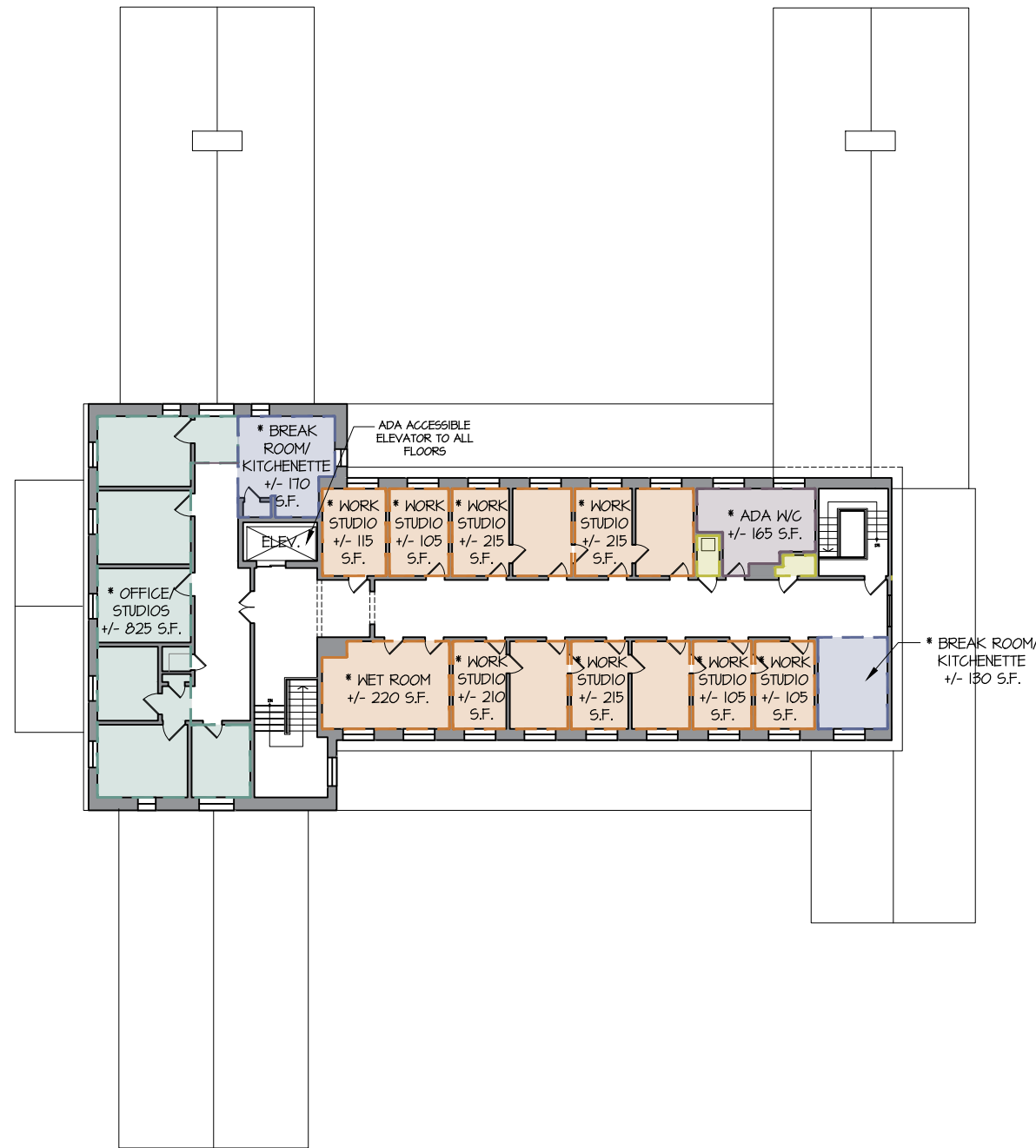


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SYMBOL LEGEND	
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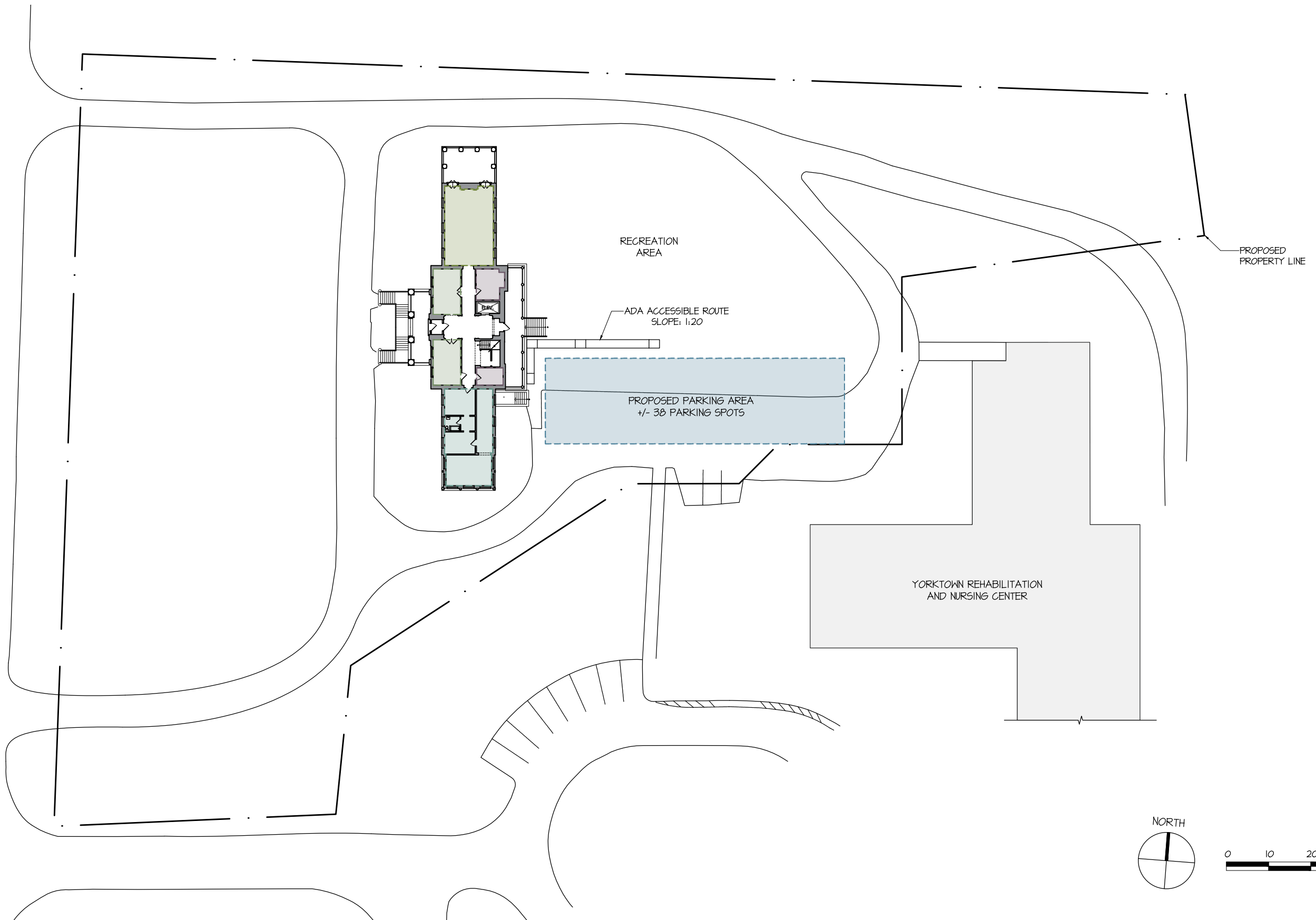
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SCALE: 1/24" = 1'-0"



SYMBOL LEGEND	
*	ADA ACCESSIBLE SPACE

0 10 20 30 40 FT

CATHERINE STREET



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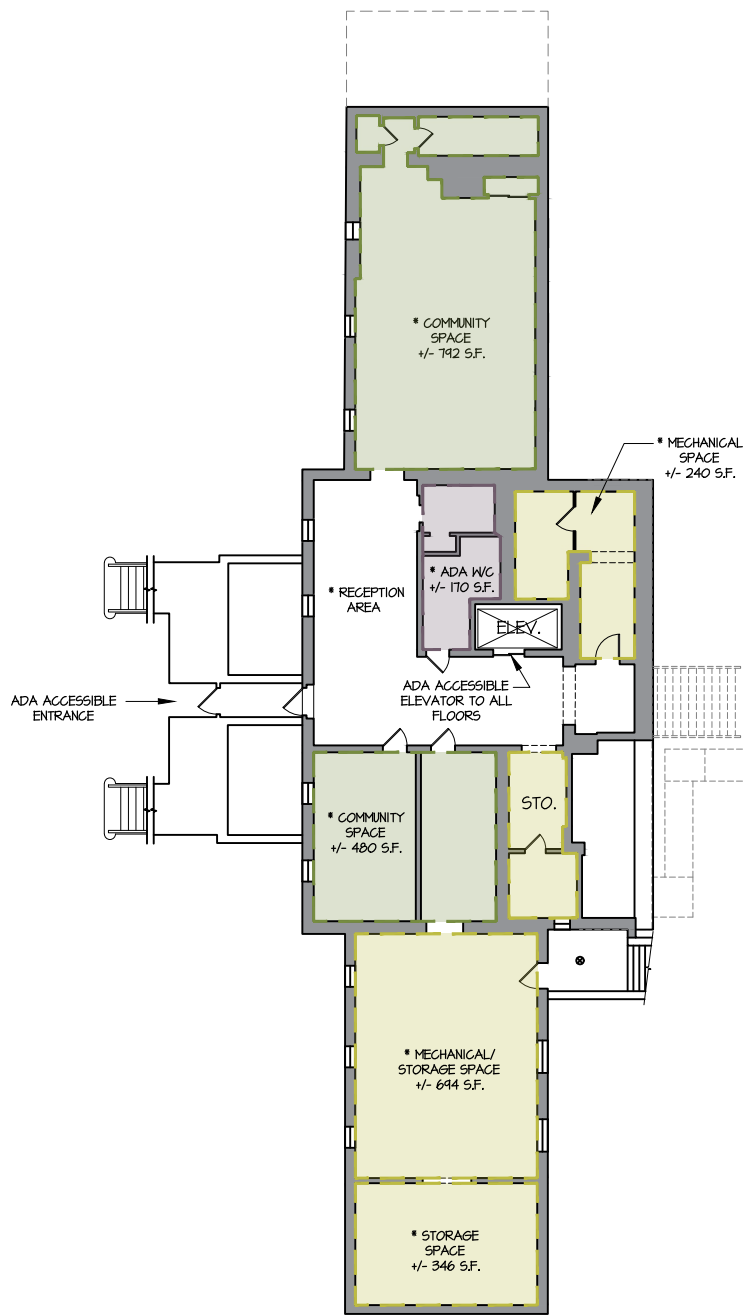
Project: FIELD HOME  
2302 Catherine St, Yorktown, NY 10567

Title: OPTION 3 "WORK HERE" OFFICE OPTION  
SITE PLAN

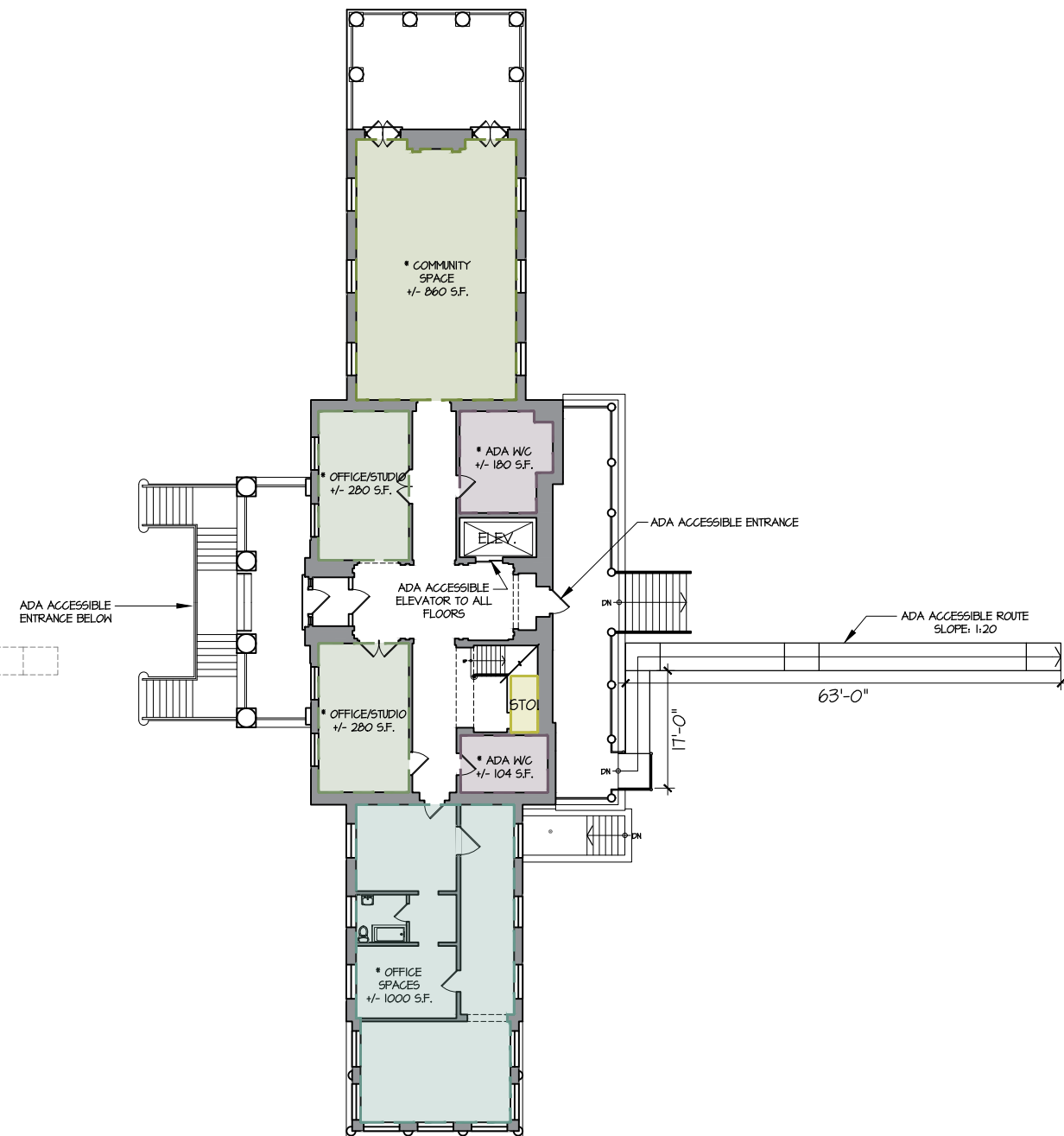
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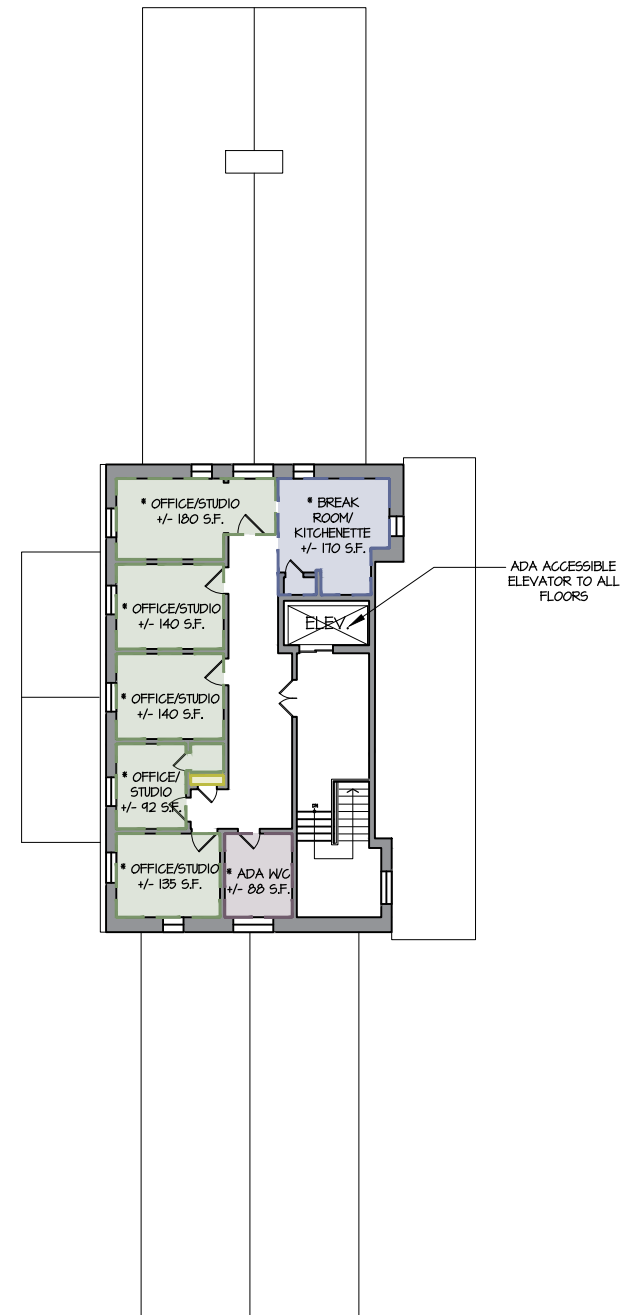




1 OPTION 3 BASEMENT FLOOR PLAN  
SCALE: 1/24" = 1'-0"



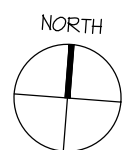
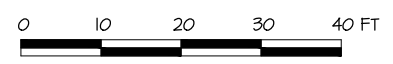
1 OPTION 3 FIRST FLOOR PLAN  
SCALE: 1/24" = 1'-0"



1 OPTION 3 SECOND FLOOR PLAN  
SCALE: 1/24" = 1'-0"

SYMBOL LEGEND

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**APPENDIX**  
**ARCHITECTURAL OBSERVATIONS**

# SITE



Entry drive from south, with pre-fab office building and parking lot along west lawn (left)



South Elevation with parking and porch providing primary visitor entry, looking northeastward



South Elevation with parking, at eastern/Chapel end looking westward to 1924 addition



Neighboring northern block of Yorktown Rehabilitation & Nursing Center beyond southeast curve of driveway

## DESCRIPTION

The Field Home is located atop a slight knoll with a grand lawn that slopes downward from the west façade of the building to Catherine Street. One driveway entry to the north provides access to the semicircular driveway that goes around the back side of the building, as well as an additional spur across the front of the building. This driveway can also be accessed by the entrance to Yorktown Rehabilitation & Nursing Center to the south.

A pre-fab office outbuilding, accompanied by a parking lot, is situated in the southwest corner of the site and is accessed by a separate entry from Catherine Street.

A small outbuilding surrounded by low trees is also present along the driveway leading from the back of the neighboring nursing home to join the northern portion of the Field Home driveway.

In addition to the satellite building and parking lot, several older trees and a flagpole occupy the grant front lawn. Several additional trees are located immediately around the perimeter of the building, primarily in front of the main





North Elevation including 1889 Chapel (left) and pair of 1924 pavilion additions with open porches



Lawn and porch of at northern side of 1897 Addition, bookended by pavilions

façade. A single tree also remains within the northern courtyard, between the pavilions.

Older photos and remnants of stumps within the courtyard testify to additional trees being onsite in the past.

Additional lawns are extant between the foundation of the building and the encircling driveway, as well as beyond the northern edge of the driveway and to the northeast, beyond the northern extent of the neighboring nursing home.

Field Hall sits upon the site with a raised portico and first floor level. Virtually the entire building plan includes a full basement level, with the exception of the outermost extents of the pavilions. The oldest Chapel portion is almost fully below grade and the Central section is approximately half-way below grade with sizable windows providing light and ventilation. The West Addition is almost entirely above grade and contains one of the two doors that opens to grade.



Driveway along formal entry at 1924 Addition, looking southward



North and West Elevations from northwestern corner of grand front lawn, near Catherine Street



# EXTERIOR

## WEST ELEVATION



West Elevation, 1924 addition, as viewed from the lawn and Catherine Street



West Elevation, 1924 addition, grand entry with pedimented portico, Ionic columns, grand staircase, & Basement entry



Details of portico: flaking paint on wood pediment, columns, & concrete wall; severely deteriorated volutes on Ionic capitals

## DESCRIPTION

This classical Greek temple elevation with Ionic columns and pilasters, bookended by pavilions, is the most recognizable view of the building. The central pediment of the building, symmetrical staircases leading to the raised first floor level, and the sloping lawn all highlight the grand nature of the building.

The roofs of these portions of the building include slate (difficult to observe but likely fair to poor condition) and replacement asphalt shingle (good condition). The wood pediment, columns, pilasters, cornice, and trim appear to be mostly in fair condition, although most components have peeling paint and are exposed to the elements. The details of the volutes of the capitals are visibly worn or deteriorated.

Gutters are extant on the roofs but appear to be overflowing or contributing to water infiltration along the main face of the building, adjacent to the pilasters, where paint is visibly peeling.

Elements of the concrete building construction from 1924 are exhibiting signs of structural settling or poor design and are in need of repair: the minimal space between first and second floor windows of the projecting central mass all have vertical cracks; the central portico floor is uneven (see interior Basement photo showing exposed rebar of underside); significant vertical and horizontal cracks are present at the West Pavilion; and corners of some concrete stair treads have popped off.

Additionally, a significant portion of the northern downspout is missing, subjecting the immediate wall area to stormwater flows and disallowing drainage to travel into the associated below-grade drainage pipe.



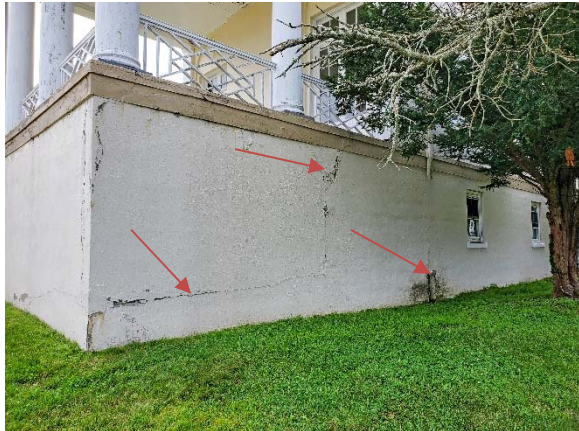
# EXTERIOR WEST ELEVATION



Details of portico: flaking paint at entire wood pediment, entablature & columns; staining below main façade gutter



Vertical cracks in concrete wall between first & second floor window openings (all bays of portico)



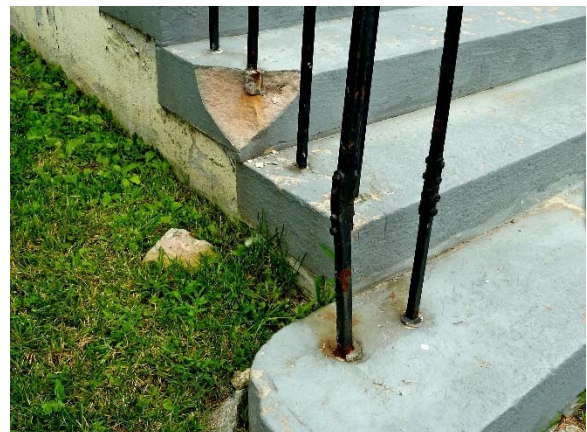
West Pavilion: vertical & horizontal cracks in basement wall & at porch floor/table; missing portion of downspout (right)



In-window air conditioning units; multiple split system condensing units with conduit overlapped by downspout



Portico floor: deteriorated/spalling concrete stair edge, uneven pavers, peeling paint (floor & ceiling above)



Staircase at entry: corner of concrete step popped off; visibly repaired, rusty iron balusters; peeling paint on concrete wall

# EXTERIOR SOUTH ELEVATION



South Pavilion (enclosed), 1924 addition: peeling paint & rusting at pediment & engaged Ionic columns



Central Addition (1897): porch in fair condition with likely original standing seam roof, replacement balusters, parking



View of existing louvered cupola from southeast: portion of roof lifting upward; little paint remains; copper details; birds

## DESCRIPTION

This elevation of the building is the primary entry point for most visitors and staff, and includes exterior access to the basement as well as the porch/raised first floor. A lift along the eastern end of the porch appears to provide accessibility to the main floor, in addition to a staircase.

The roofs on this portion of the building include the steep and low gambrel slopes of slate (fair condition, some repairs required) and the standing seam metal (likely painted tin) porch and small entry portico roof (fair to poor condition). The pediment of the South Pavilion is exhibiting rust stains and needs to be painted.

The louvered cupola appears to be structurally sound but the western portion of its roof has lifted up from the cornice and the wood is in need of paint as well. Additionally, the segment of gutter on the 1924 addition, above the western end of the porch, is significantly drooping and ineffective: paint failure and rusty backsplash from the porch roof against the wall is evident. Both of these conditions should be remedied urgently.

The coating atop the porch floor is panning and holding water at the center area and should be further investigated. The drainage trench along the façade appears to be filled with detritus and biological growth. Similarly, the drain at the areaway to the basement door is covered with a crate and should be repaired or cleaned.



# EXTERIOR SOUTH ELEVATION



Entry portico (1924 Addition): stair to entry doors on porch; lift to porch/first floor level; vestibule leading to Chapel



South porch: replacement balusters, coated floor and Tuscan column bottoms; bird deterrent visible above windows



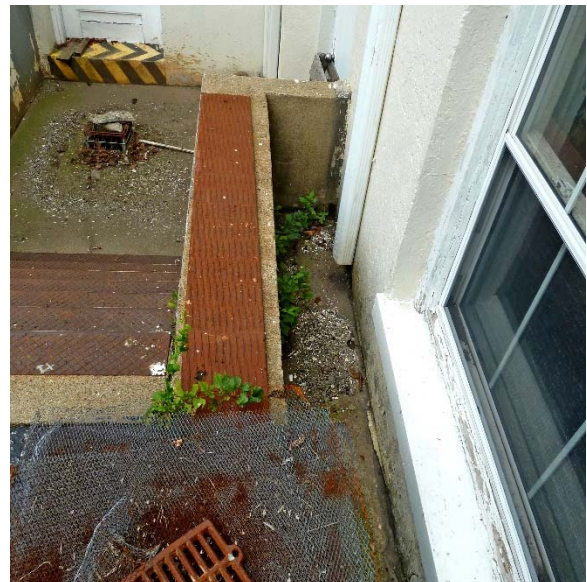
East wall of 1924 Addition: deformed gutter allowing stormwater overflow down wall; peeling paint



East wall of 1924 Addition: peeling paint and visible staining on concrete walls; original porch roof and flashing with repairs



Stairs and lift (possibly inoperable) beneath entry portico, providing access to porch/first floor level



Drainage trench outside basement windows at western end of façade; stairs to basement entry with crate protecting drain



# EXTERIOR

## EAST ELEVATION, CHAPEL



Chapel (1889), south elevation



Chapel (1889), east elevation with small porch supported by paired Tuscan columns; portico and pavilions in the distance



Chapel (1889), north elevation with East Pavilion (1924); driveway encircling the building visible

### DESCRIPTION

This portion of the building includes the original Chapel construction with the simplest massing.

As on the South Elevation, this section of the building has slate roofs in fair to poor condition. The northern side of the building also has snow rails. The wood dormer window walls and trim are in fair condition, and in need of paint. The section of northern steep-slope roof adjacent to the East Pavilion is in especially poor condition with scoured slates and significant portions of the soffit and cornice missing. The interior walls in this area of the second floor are also in poor condition, suggesting structural settling and/or significant water infiltration. Additionally, a portion of the exterior wall at this juncture is visibly scoured and missing paint. The chimney appears to be in fair condition.

The small porch that terminates the building along the East Elevation is in good condition, although the standing seam roof is likely near the end of its material life.

The lower portions of the concrete walls, under the windows sills to grade level, are exhibiting significant signs of deterioration that are also evident in the interior. Downspouts next to the vestibule are not connected to in-ground drainage pipes or directed away from the walls with extensions.

Bulkhead doors and windows provide access or light to the basement. The northeast corner of the building is immediately adjacent to the macadam driveway and the corner is visibly deteriorating.

# EXTERIOR EAST ELEVATION, CHAPEL



Chapel, south elevation: Slate gambrel roof in fair condition with some slates slipping or displaced; peeling dormer trim



Entry portico (1924 Addition): lift to porch/first floor level adjacent to vestibule leading to Chapel (all beneath roof)



Chapel, north elevation: various utilities, tanks, services present along this façade/lawn



Chapel, north elevation: roof soffit very deteriorated and open; peeling paint on wall; downspout at corner with pavilion



Chapel, south elevation: peeling paint and repairs at lower walls; access point to basement level



Chapel, east elevation: peeling paint along northeast corner of building & concrete stair; macadam driveway with repairs



# EXTERIOR NORTH ELEVATION



Dormer above East Pavilion: wood panels adjacent to roof very deteriorated from splash back; disconnected triangular panel



East Pavilion roof (likely original standing seam, 1924); at end of service life with numerous repairs/rust; gutter drooping



East façade of East Pavilion: horizontal & vertical cracks at basement level; broken edge of porch floor; Tuscan columns

## DESCRIPTION

The materials of this side of the building are generally the same as those of the South elevation; however, due to greater exposure from the north accompanied by an open lawn, they are typically in worse condition.

The dormer immediately above the East Pavilion is in especially poor condition with peeling paint, splash back visible above the roofline, and disconnected panels creating a significant opening in the wall.

The standing seam roof of the East Pavilion is in poor condition and shows numerous repairs: the skylight was not visible from the exterior but the interior shows signs of significant water infiltration (see Second Floor). The condition of the porch roof appears to be very similar to that of the south, including repairs and splash back along the adjacent walls. The roof of the West Pavilion is replacement asphalt shingle and appears to be in good condition.

The foundation walls below the pavilion porches and the north porch steps all show signs of structural movement, likely related to the change from interior conditioned space to unconditioned voids. This issue is especially apparent with the cracks at the pavilions that appear on the east and west sides, from just southward of the central column outward.

Additional issues of concern include greater deterioration of the columns and presence of moss along the north porch, which receives less daylight. The drainage trench along the north porch is also filled with detritus and biological growth, and plaster failure on the interior suggests overflow and extensive water infiltration.



# EXTERIOR NORTH ELEVATION



East Pavilion: extremely deteriorated torus of column along north façade; porch floor covering peeling away



East Pavilion, west wall: cracks at basement level where interior spaces begin & at water table/edge; peeling paint



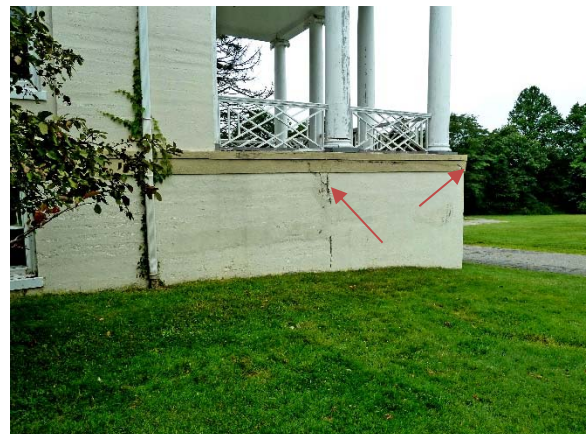
East wall of 1924 Addition: peeling paint and visible staining on concrete walls; original Porch roof and flashing with repairs



North porch stairs: visible structural cracks on side wall(s); displaced & rotated lowest two stairs/treads; peeling paint



Drainage trench outside basement windows at western end of façade; significant mildew/moss; water infiltration to interior



East façade of West Pavilion: vertical cracks at basement level; broken edge of porch floor; Ionic column separating



# INTERIOR BASEMENT



Central hallway inside exterior entry, looking eastward to Chapel basement/mechanical room



Structural arches in historic laundry (north rooms) providing structural support to exterior walls above; peeling paint



Structural arches outside elevator mechanical space (south rooms); peeling paint; deteriorated & stained ceiling boards

## DESCRIPTION

The full-height basement is present within almost the entire plan of the building. Light-filled spaces occupy the western and central portions of the building, where the floor level is accessible from the western exterior entry door.

The basement space below the Chapel is separated from the remainder of the interior space by a single door, and the main floor of this mechanical space is available via a ramp. This space houses the main electrical panels, sprinkler valve controls and related equipment in one space as well as boiler and water heaters in a pit along the south half of the room, a few additional feet lower than the main space.

The greatest deterioration of the interior surfaces at this level are along the exterior walls of the north and south porches (below the windows) and the east wall of the South Pavilion: water infiltration from the exterior (i.e. impeded drainage trenches or storm water flow), with finished grade just inches below window sill level, appears to be the main culprit.

Water infiltration at the floor of the main portico on the West Elevation via a different path is evident with the rusted and exposed rebar under the portico floor slab and a significantly rusted exterior steel frame below.

The floors appear to be in typically fair condition, despite the evidence of previous leaks on the walls that likely also created puddles of water on the floors. Some ceiling finishes have been compromised, although they appear to be related to failures on the first floor above.

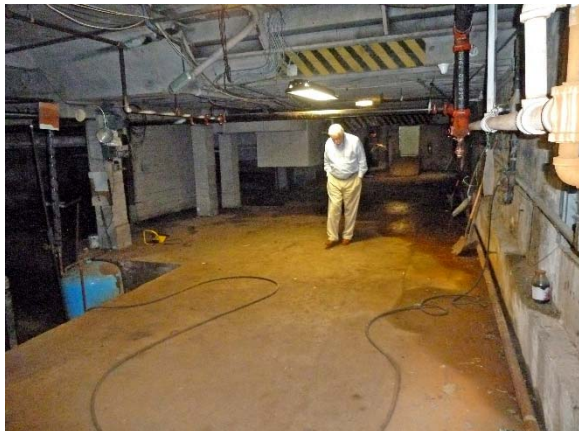
# INTERIOR BASEMENT



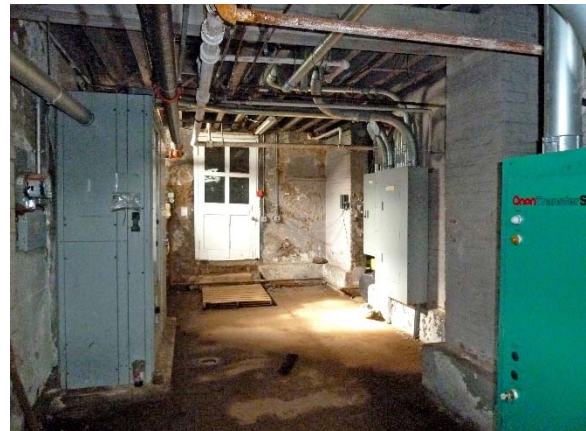
East wall of basement below South Pavilion: deteriorated wall finish; peeling paint, leak kindly identified



Central hall looking towards kitchen in East Pavilion, with door to mechanical room beneath the Chapel on the right



Mechanical room, looking westward to door with southern pit to the left; change in Chapel first floor joists visible above John



Easternmost mechanical space beneath Chapel, looking southward; houses electrical panels, meters, transfer switches



Exterior basement door, at West Elevation: steel frame severely rusted & disconnected with bird nest inside



Underside of West first floor entry portico: concrete slab with multiple rebar visible & rusty near the deteriorated surface



# INTERIOR

## FIRST FLOOR



Central hall looking from stair hall outside Chapel westward to main entry vestibule: good condition and currently in use



East Pavilion (1924); deteriorated plaster cornice with repair, likely due to water infiltration from roof/gutter; sprinkler pipes



West Addition (1924), north parlor: deteriorated plaster cornice above window valance (similar condition, south parlor)

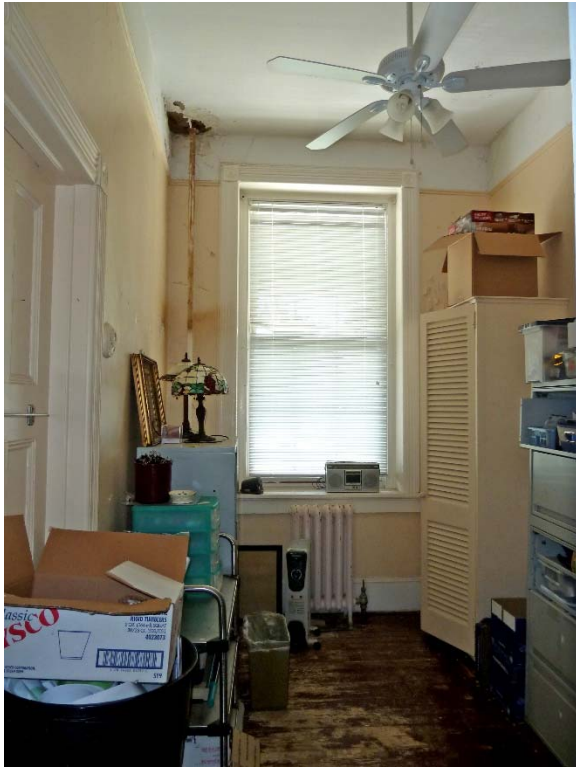
### DESCRIPTION

The first or primary floor of the building is at several different elevations, posing an accessibility challenge, including from exterior grade. The lowest floor elevation is at the Chapel nave/pews, accessible via the door at grade on the south (assumed, not accessible). Other elevations, moving upward, include the Chapel sanctuary; Chapel offices (with its separate entry and small porch at the east end); and the Main First Floor and porches a half-story above grade in most locations.

With the exception of the Chapel, which has not been used since 1998, the majority of the first floor is currently used and finishes and materials are typically in good to fair condition. Specific locations of deteriorated plaster point to particular failures at the roof of the East Pavilion, along the main West façade, or due to plumbing leaks from above. Some spaces include dropped ceilings.

The condition of the interior wall finishes of the Chapel is poor. Paint below the window sills is peeling and deteriorated in almost all locations of the nave, at times presenting earlier layers of red and blue paint, as well as bare concrete. Fiber board ceiling panels installed atop the original beadboard ceiling are falling. Some of the sheet metal pilaster covers that appear to cover vertical ties are no longer connected together. The carpet is threadbare but the floor boards appear to be sound. The office spaces are in better condition, with primarily intact finishes.

# INTERIOR FIRST FLOOR



Office: deteriorated dropped ceiling with leaky, rusty pipe; peeling paint on exterior wall



Chapel, north windows: disconnected fiber board applied atop beadboard; deteriorated finishes below window sills



Chapel, south wall: severely deteriorated finishes below window sills, allowing view of previous paint layers & bare concrete



Chapel, south wall by sanctuary: sheet metal pilaster/tie cover disconnected; peeling paint on exterior wall and cover



# INTERIOR

## SECOND FLOOR



Central hall looking eastward from landing by elevator; transom above doors that open to rooms above Chapel



Central Addition (1924), hall near central stair: water-stained ceiling; access panel to attic and louvers to whole-building fan



North bedroom near joint with East Portico: severe cracks along entire wall (typical both sides of room)

### DESCRIPTION

The Second Floor of the building, consisting primarily of residential rooms, bathrooms, and offices, has not been in constant use since 1998 but it has not suffered as badly from disuse as the Chapel.

As on the First Floor, finishes are typically in good to fair condition, with the exception of specific locations where water has infiltrated the ceiling from the roof above (hallway ceiling near the access panels to the cupola; around the skylight, and on the ceiling and wall of the intermediate level records room at the East Pavilion). Additionally, areas affected by water/steam include surfaces around select radiators.

Layers of plaster appears to be separating on the walls of at least one bathroom. The stamped sheet metal panels on the walls and ceiling of the hall above the Chapel may have been installed to cover or modernize finishes such as plaster or beadboard (visible in historic photos of the Chapel).

Generally the floors appear to be sound and in good to fair condition, although door saddles and the different carpets attest to a variety of use patterns.

An area of significant concern includes the partition walls at residential room #30 and the beauty parlor, just adjacent to the joint with the East Pavilion added on in 1924. This area would have been the northwest corner of the original Chapel construction: the exterior roof and soffit is compromised (see North Elevation) and structural problems may be an issue.

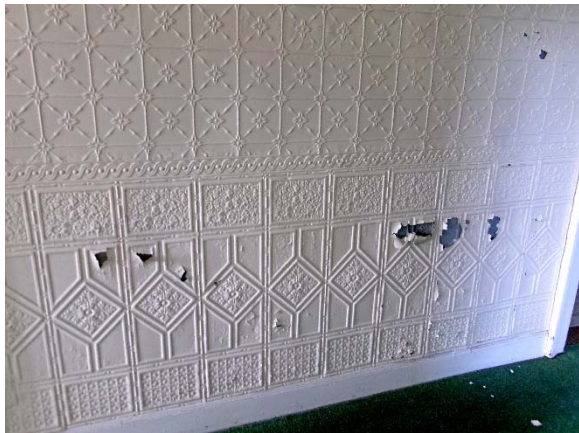
## INTERIOR SECOND FLOOR



Peeling & bubbling wall and baseboard finishes around steam radiator suggests ineffective or failing controls



Kitchenette: floor probe exposes plaster walls above a dropped ceiling, and concrete wall penetration



Hallway finish above Chapel: stamped sheet metal panels with peeling paint



Bathroom at western end of hall: painted finishes bubbling, settling, and falling off at partition wall to linen closet



Records room at East Pavilion stair landing: deteriorated ceiling plaster, peeling paint, replacement glazing



Records room at East Pavilion stair landing: very deteriorated plaster with repair attempt; water-stained ceiling



# BUILDING SYSTEMS

## DESCRIPTION

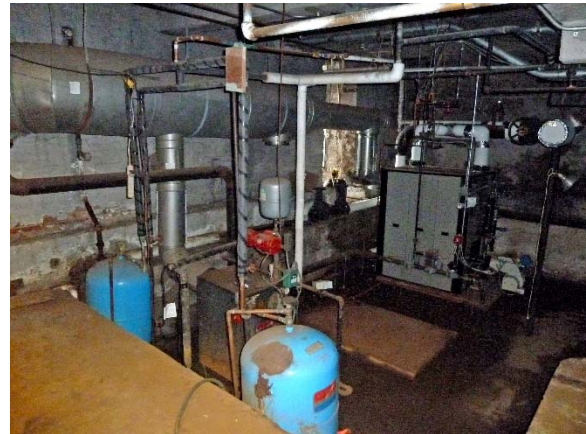
The existing systems include the following (information provided by engineer's notes):

Sprinkler System: installed 1986

Heating: building converted from oil to gas in 1991, and most recent boiler installed in fall, 2022; oil tank professionally abandoned in place under macadam at corner of Chapel; steam radiators

Domestic Water: two tanks are located in the mechanical pit, near the boiler

Electrical System: new system installed in 1991, including salvaged emergency generator; new external feeds installed 2003



Basement mechanical pit: boiler and hot water tanks



Basement mechanical room: controls for sprinkler system



East Pavilion basement: likely remnants of 1924 systems



Chapel above basement mechanical room: floor registers in central aisle

# ACCESSIBILITY

## DESCRIPTION



Primary access to first floor provided by stairs and lift to south porch, and Chapel entry, on grade, along the South Elevation



West Addition (1924) allows accessible exterior entry directly to basement level, with exterior stairs to the first floor



Chapel floor (nave/pew level) is seven risers below the main first floor level

The building includes points of entry at both the basement and first floor levels. The main rooms in the basement (not including the mechanical space) are at a single elevation which can be directly accessed from the door beneath the western/main portico, providing an accessible circulation path to the elevator.

The First Floor has 4 different elevation levels, with the floors on the West and Central Additions of the building consistently at the same elevation. The Houghton hydraulic elevator, installed in the West Addition in 1963, stops at all three of the floors in the West Addition and can serve the Central Addition as well as the Second Floor above the Chapel.

An exterior lift is installed to provide access from grade at the south porch.

The Chapel has three different elevation levels: the main nave/pews are accessible from grade but the sanctuary and office spaces/east porch are several steps higher. However, none of these spaces are at the same elevation as the First Floor in the later additions.



Elevator installed in 1960s, in West Addition (1924): in memory of the founder Cortland dePeyster Field



**ATTACHMENT J**

**RECREATIONAL IMPACT ANALYSIS, PREPARED BY  
ESE CONSULTANTS, DATED OCTOBER 5, 2023**



# RECREATION IMPACT ANALYSIS

FIELD HOME PROPERTY

2300 & 2448 CATHERINE STREET

PROPOSED RESIDENTIAL DEVELOPMENT

**118-UNIT AGE-RESTRICTED TOWNHOME COMMUNITY**

TOWN OF YORKTOWN, WESTCHESTER COUNTY, NEW YORK

prepared for:

Toll Brothers, Inc.

42 Old Ridgebury Road, Danbury, CT 06810

prepared by:

Hannah Mazzaccaro, AICP

License #147777

July 17, 2023

**Revised October 5, 2023**

**Field Home Property - 2300 & 2448 Catherine Street****Supplement to The Petition for Zoning Map Amendment – Recreation Impact Analysis**

Toll Brothers, contract vendee to purchase the “Field Home” property located at 2300 & 2448 Catherine Street, has submitted a Petition for Zoning Map Amendment to rezone the property to the RSP-2 District in order to allow for the proposed development. The proposal comprises a 118-unit townhouse community for 55+ “active adults” that includes amenities such as a clubhouse with a fitness center and pool. In order to achieve the project goals, it will require the demolition of an existing recreation field, which is currently utilized by the Yorktown Parks and Recreation Department for youth soccer and lacrosse operations. This usage is permitted through a lease agreement created in 2006 between the Field Home – Holy Comforter (owners of the property) and the Town of Yorktown. This lease is set to expire in January of 2026, and it is our understanding that the Field Home will not seek a renewal.

This report assesses the current and future recreational needs of the Town with reference to the subject property and the proposed field decommissioning. As part of the Petition, and in addition to the anticipated development Recreational Fees of \$472,000, the applicant has offered to voluntarily contribute \$100,000 to the Yorktown Parks and Recreation Department for recreational improvement projects to mitigate the loss of the Field Home field.

**History:**

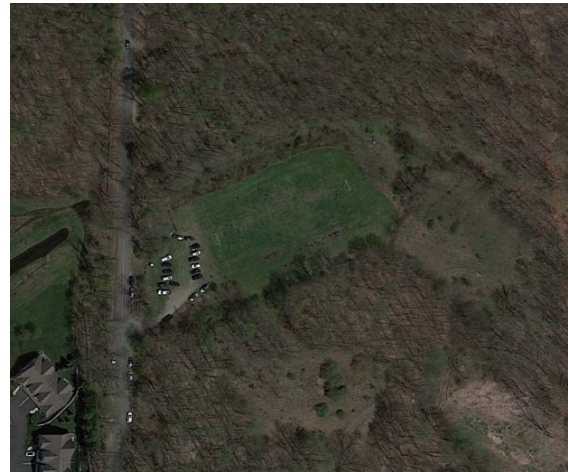
Prior to 2003, a practice field existed across the street on the property known today as Glass bury Court (Tax ID 35.12-1-1). After Wilder Balter Partners purchased that property, the field was demolished as part of the Glass bury Court development. During the approval process it is assumed that an agreement was drafted between Balter, the Town of Yorktown and the Field Home to relocate the field to the Field Home property. Based on aerial photography it appears that the Glass bury Court field was decommissioned between 2002-2004, and the relocated field was completed between 2008-2009 on the Field Home property. Since that point in time, the relocated field has been utilized by the Town of Yorktown’s Recreation Department for their youth soccer and lacrosse league operations.

**2002 Aerial:****2009 Aerial:**

**Field Characteristics:**

In analyzing the Field Home field and the impact of its decommissioning, it is necessary to understand its in-situ condition and quality. The below information, collected in collaboration with the Yorktown Department of Recreation, serves as a summary of its characteristics. Due to its absence of gameplay infrastructure and quality, the field is primarily practice in nature and use.

Field Characteristics	
Type of Field	Practice
Field Surface	Mown Grass
Condition	Fair
Size	Full size
Age	14 Years
Equipment	Goals only
Seating	None
Fencing	None
Parking	Ad-hoc: dirt and street parking
Restrooms	Port-o-John
Maintenance	Mowing only
Irrigation	None



**Field Usage:**

The applicant has coordinated with the Yorktown Department of Recreation to obtain usage statistics for the Field Home field. The below chart is a synopsis of that information, which serves as a baseline for understanding the loss of use due to its decommissioning. In general, due to the lack of parking, lighting, and “gameplay” condition of the field, it is primarily used for practices, though it is also sometimes used for youth games on weekends.

Field Usage	
Usage Timeline	March - November
Weekday Frequency	Evenings - Daily
Weekend Frequency	All Day - Daily
User Demographic	Youth
User Ages	6 to 14
User Sports	Soccer & Lacrosse
User Activities	Primarily Practice, Games as needed on Weekends.
# of Teams	>14
Typical Duration of Use	1.5 Hours/Group
Typical Reservations/Week	20-22/Week
# of Similar Fields in Town	2 (Hunter Brook & Veterans)



**Current and Future Demand:**

According to the 2010 Yorktown Comprehensive Plan, “Yorktown has an abundant supply of parkland, exceeding national standards for park acreage” (Chapter 9 – Parks and Recreation, Page 2). The National Recreation and Park Association (NRPA) recommends that a municipality provide between 6.25 to 10.5 acres of parks per 1,000 residents. The 2010 Comprehensive plan noted that if only the town-owned parks are counted, Yorktown has 12.75 acres of parkland per 1,000 residents. If County and State parks are also counted, the recommended ratio of parkland is far exceeded. The population of Yorktown has stayed almost the same since 2010, so this recreation ratio is still accurate.

The Yorktown Comprehensive Plan concludes that the Town’s priority in the future should be to make strategic improvements to serve target demographics and to enhance and maintain existing lands and facilities, not to acquire more land. According to the Yorktown Recreation Commission, Yorktown is in need of athletic fields, particularly those that are conducive to competitive gameplay.

Based on New York State Enrollment data for the Yorktown and Lakeland School Districts, it is anticipated that Town-wide demand for recreational amenities and for youth sports fields will not increase in the near future. Enrollment has decreased -8.2% in the Yorktown School district, and -11.1% in the Lakeland School District over the last decade. Yorktown School district enrollment increased only .03% over the “pandemic years” (2020-2022), and enrollment decreased -1.5% in the Lakeland School District during the same period.

The proposed project is a 55+ “active adult” community, and thus will not generate any school children who historically have the greatest impact on Town recreation facilities (2010 Comprehensive Plan, Chapter 9, Page 14). The proposed community contains a private clubhouse amenity including a fitness room and pool. It is well documented that older adults have a much smaller impact on Town recreational amenities compared to other demographics. Given these factors, we do not anticipate an increase in Town recreation demand nor any negative impact to Town facilities as a result of the proposed project and its residents.

NYS Enrollment Data									
School Year	2011-12	2014-15	2017-18	2018-19	2019-20	2020-21	2021-22	Inc./Dec.: 2011-2022	% Inc./Dec.
YORKTOWN	3,698	3,440	3,442	3,394	3,401	3,381	3,394	(304)	-8.2%
LAKELAND	6,115	5,835	5,661	5,591	5,578	5,521	5,435	(680)	-11.1%

Source: New York State Education Department (<https://www.p12.nysed.gov/irs/statistics/enroll-n-staff/home.html>)

**Potential Mitigation:**

The applicant has proposed a 1:1 mitigation strategy - in this context, a “like” for “like” mitigation of the Field Home field loss based upon its characteristics and usage demand listed above. During collaboration with the Yorktown Parks and Recreation Department, it was suggested that improvements at the Hunterbrook Recreation Area could adequately serve as mitigation for the loss of the Field Home recreation field by enhancing the facility at large, particularly by way of improvements to the underutilized upper field. In doing so, the upper field could be made to be of commensurate quality and capacity to that of the Field Home field. Because it is similar in nature, and in being proximate to Catherine Street, it is uniquely positioned to serve the same constituents that use the Field Home field

today. The Yorktown Parks and Recreation Department indicated to the applicant that, if improved, the Hunterbrook Recreation Area will adequately accommodate the usage lost by the decommissioning of the Field Home field.

Field Home/Hunterbrook Aerial:



Hunterbrook Aerial:



**Hunter Brook Recreation Area Characteristics:**

The Hunterbrook Recreation Area is a multi-purpose, mown grass facility comprised of two zones of use – lower and upper. The lower field contains both a baseball field with a backstop and a full-sized soccer/lacrosse field with goals. It is considered to be in fair condition and is used primarily for practice with some gameplay on the weekends. The upper field is of lesser quality and condition, and only a portion of it is utilized due to its in-situ conditions. The facility at-large is serviced by an ad-hoc dirt parking area, limited street parking, and there is a Port-o-John present while in season. There is no seating nor irrigation present on either field.

Lower Field Characteristics	
Type of Field	Practice/Some Gameplay
Field Surface	Mown Grass
Condition	Fair
Size	Full size
Age	Over 20 Years
Equipment	Goals for Soccer/Backstop for Baseball/Basketball Hoop
Seating	None
Fencing	Some Perimeter Fencing
Parking	Limited Dirt and Street parking
Restrooms	Port-o-John in Season
Maintenance	Mowing/Re-Seeding/Trimming/Field Maintenance
Irrigation	None

Upper Field Characteristics	
Type of Field	Overflow Practice Only
Field Surface	Mown Grass
Condition	Less Than Fair
Size	3/4 Size
Age	Over 20 Years
Equipment	None
Seating	None
Fencing	None
Parking	Limited Dirt and Street parking
Restrooms	Port-o-John in Season
Maintenance	Mowing and Re-seeding
Irrigation	None

**Hunter Brook Recreation Area Usage:**

The lower field is principal to usage and play, while the upper field is secondary, underutilized, and considered overflow due to its condition. The lower field is generally used for practices, but accommodates some gameplay on weekends. Again, due to its condition, only a portion of the upper field is utilized – solely for overflow practice and drills. Both fields are utilized by similar sports, age-groups, and leagues as the Field Home recreation field.

RECREATION IMPACT ANALYSIS: 118-UNIT AGE-RESTRICTED TOWNHOME COMMUNITY

Lower Field Usage	
<i>Usage Timeline</i>	March - November
<i>Weekday Frequency</i>	Evenings - Daily
<i>Weekend Frequency</i>	All Day - Daily
<i>User Demographic</i>	Youth
<i>User Ages</i>	2 to 17
<i>User Sports</i>	Soccer/Baseball/Lacrosse
<i>User Activities</i>	Primarily Practice, Games as Needed on Weekends.
<i># of Teams</i>	>20
<i>Typical Duration of Use</i>	2 Hours/Group
<i>Typical Reservations/Week</i>	25-30/Week
<i># of Similar Fields in Town</i>	2 (Catherine Street/Veterans/London Woods)

Upper Field Usage	
<i>Usage Timeline</i>	March - November
<i>Weekday Frequency</i>	Evenings - Daily
<i>Weekend Frequency</i>	All Day - Daily
<i>User Demographic</i>	Youth
<i>User Ages</i>	2 to 17
<i>User Sports</i>	Soccer/Lacrosse
<i>User Activities</i>	Overflow Practice Only
<i># of Teams</i>	>20
<i>Typical Duration of Use</i>	2 Hours/Group
<i>Typical Reservations/Week</i>	Overflow Practice Only
<i># of Similar Fields in Town</i>	2 (Catherine Street & Veterans)

**Conclusion:**

As outlined above, the Town of Yorktown is well-served by parkland, and the future demand for recreational facilities is expected to remain stable, with little to no future growth expected in youth sports demand. While the town has more than enough parkland, the Town has identified a need for better-equipped playing fields for youth sports. The existing field at Field Home is not of high quality for game play, and it doesn't offer such amenities as lighting, paved parking, or restrooms. The Hunterbrook Recreation Area has the potential to be a better playing facility, with more room for parking, multiple fields, and an existing clubhouse building. We assert that the proposed improvement of the Hunterbrook Recreation Area, particularly the upper field, or a similar field improvement elsewhere if the Town decides on an alternate location, would fully mitigate the loss of the Field Home field.

It is our understanding that the Town of Yorktown will require recreation fees as part of the project approval. These fees are typically administered on a per unit basis and are currently estimated at \$4,000/unit. For the proposed 118 units, that equates to a \$472,000 fee for a project that would place a marginal demand on Town recreation amenities due to the demographics of the end-users and the inclusion of on-site recreational amenities to serve those new residents. In addition, as per the fiscal report submitted in the petition, the applicant estimates \$1,017,702 of annual net surplus public revenue will be generated by the project.

The proposed voluntary \$100,000 recreation contribution the applicant has offered, in combination with the anticipated one-time Recreation Fees totaling \$472,000, and the anticipated surplus annual tax revenue, will provide for field improvements at Hunterbrook to mitigate the loss of the Field Home field. In addition, the proposed project will likely provide an annual surplus of funds that can be used toward other future recreational improvements as needed throughout the town.

**ATTACHMENT K**

**TRAFFIC IMPACT STUDY – SEPARATE DOCUMENT**



**ATTACHMENT L**

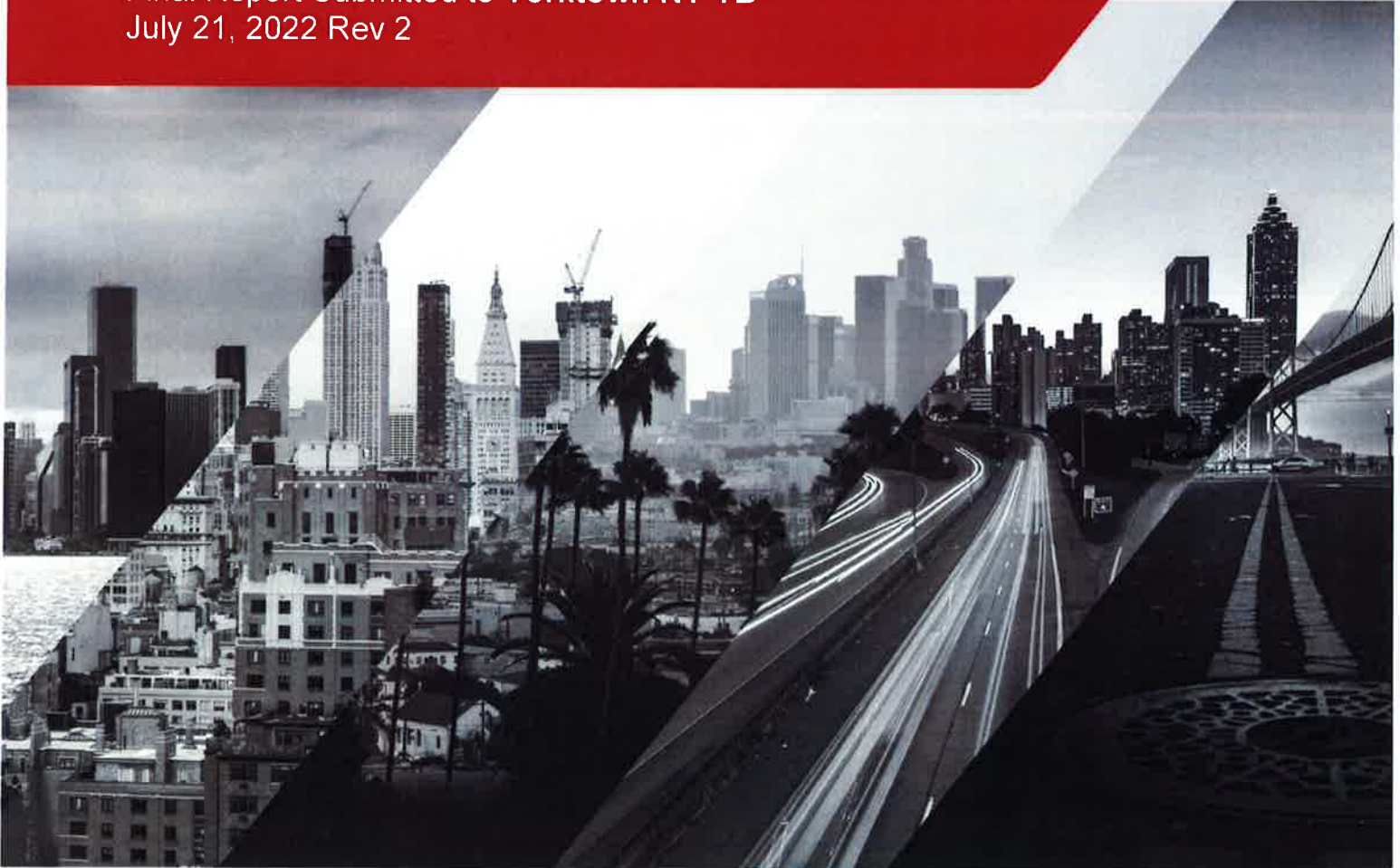
**YORKTOWN NY TB REPORT,  
PREPARED BY ADS ENVIRONMENTAL  
SERVICES**

**CORRESPONDENCE FROM THE TOWN OF  
YORKTOWN-TOWN ENGINEER DATED APRIL 20,  
2022**

Yorktown NY TB

# Yorktown NY TB

Final Report Submitted to Yorktown NY TB  
July 21, 2022 Rev 2



340 The Bridge Street, Suite 204  
Huntsville, AL 35806

800-633-7246  
[www.adsenv.com](http://www.adsenv.com)



July 21, 2022

**Kevney D. Moses**  
**Land Entitlement Manager, NY Metro**  
Toll Brothers  
42 Old Ridgebury Rd, Danbury, CT 06810

**SUBJECT: Yorktown NY TB Flow Monitoring**

Dear Kevney,

ADS is pleased to submit the preliminary flow monitoring report for the Yorktown NY TB completed on behalf of Yorktown NY TB. The metering was conducted at five (5) locations. The study was conducted during the period of Thursday, 19 May 2022 to Tuesday, 12 July 2022.

The report contains depth, velocity, and quantity hydrographs as well as daily long tables for the metering period. An Excel file containing depth, quantity, and velocity entities for the monitoring location in 5-minute format was provided separately.

In addition, we would be happy to further explain any details about the report that may seem unclear. Should you have any questions or comments, you may contact the Project Manager, Mike Armes at 914.290.3093 or [marmes@idexcorp.com](mailto:marmes@idexcorp.com)

It has been our pleasure to be of service to you in the performance of this project. Thank you for choosing ADS products and services to meet your flow monitoring needs.

Sincerely,  
**ADS ENVIRONMENTAL SERVICES**

Thursday, 19 May 2022 to Tuesday, 12 July 2022



## Yorktown NY TB

### Prepared For:

Kevney D. Moses  
Land Entitlement Manager, NY Metro  
Toll Brothers  
42 Old Ridgebury Rd, Danbury, CT 06810

### Prepared By:



ADS, LLC  
340 The Bridge Street, Suite 204  
Huntsville, AL 35806





## Executive Summary

ADS provided flow monitoring services in Yorktown, NY during May-June 2022. The area of focus was near the Holy House of Comfort with the goal of measuring flows during dry and wet weather to help Toll Brothers determine the magnitude of rainfall derived infiltration and inflow (RDII).

The monitoring equipment was installed under the supervision of Toll Brothers and required an additional meter due a proposed manhole not being located. The flow schematic for the project is included on page 5. ADS field crews installed the meters and manually confirmed accurate readings by using a ruler and handheld velocity meter. A rain gauge was also installed on the property to help correlate changes in flow to rainfall. Confirmations were conducted two additional times during removal and the week prior to removal. These manual readings were used to ensure meter data was accurately reflecting the depth and velocity of flow during the project. Photographs for each installation were included in this report.

During the monitoring period three storm events over 0.50" were recorded and summarized below.

6/1 - 6/2/22 – 1.32"  
 6/8 - 6/9/22 – 1.19"  
 6/12 - 6/13/22 - .66"

These events occurred during the summer season when vegetation is fully active in water uptake. A traditional monitoring approach would also measure rain events during the winter season when vegetation is dormant to measure base flows when they are typically highest. Identifying infiltration during summer months is difficult unless the sewer lines are impacted by a high ground water table.

The meter data showed open channel conditions for the entire duration and no signs of backup in the sewer system were measured. A rough comparison of average flows for each meter before the rain events and during provides a flow differential that would identify inflow and infiltration. Using the daily tabular flow average provided in this report for each meter shows the following approximate flow differences between wet and dry.

M1 – 1000-gallon increase  
 M2 – 4000 – 8000-gallon increase  
 M3 – 4000 – 8000-gallon increase  
 M4 – No significant change

Because the flow for M2 is also measured by M3, it would be reasonable to assume the additional flow is between meters M1 and M2.

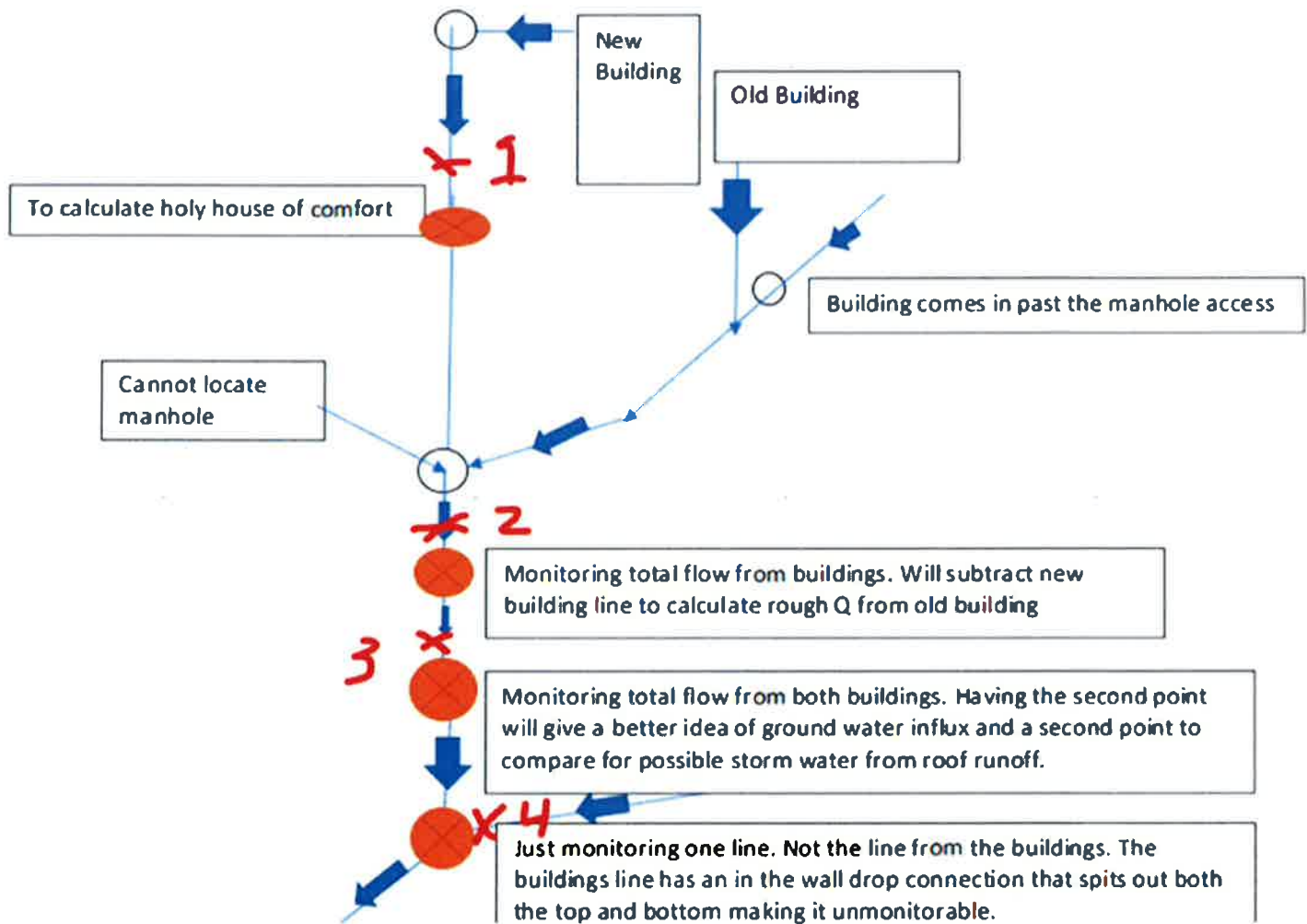
A typical RDII analysis would require more robust comparisons of storm intensity, base flow (dry day analysis) and storm analysis. This is beyond the scope of the project but could be accomplished if requested.

There are additional sewer system evaluation services (SSES) methods that could be deployed to help narrow down the problem areas. Smoke testing can help identify defects in the sewer system that allows rainwater to enter through manholes, sewers or connected drains during the storm event and typically considered Inflow. Infiltration

is the process of water leaking into the sewer system through cracks in the sewer pipes and manholes. This is usually a delayed entry as the water must pass through soil. Flow Isolation is a process that can help identify areas of high infiltration. Typically, flows are manually measured during early morning hours when the human discharge volumes are minimal.

Overall, the sewer system measured was in good repair with no notable defects. The PVC pipes showed plenty of capacity available. The data indicates minimal extraneous flows from rainfall.

### Flow Schematic



## M-1

## Site Commentary

## SITE INFORMATION

Pipe	Round (8 in H)
Silt	0.00 (in)

## OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022**, along with observed minimum and maximum data, are provided in the following table.

REPLACE OTHER SITE OBSERVATIONS HERE

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Average	0.54	1.50	0.014
Minimum	0.11	0.39	0.000
Maximum	1.07	3.41	0.062
Min Time	05/21/2022 04:00:00	06/06/2022 01:00:00	05/21/2022 00:00:00
Max Time	06/30/2022 14:00:00	06/30/2022 14:00:00	06/30/2022 14:00:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the one-hour average.

## DATA UPTIME

Data uptime observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022** is provided in the following table:

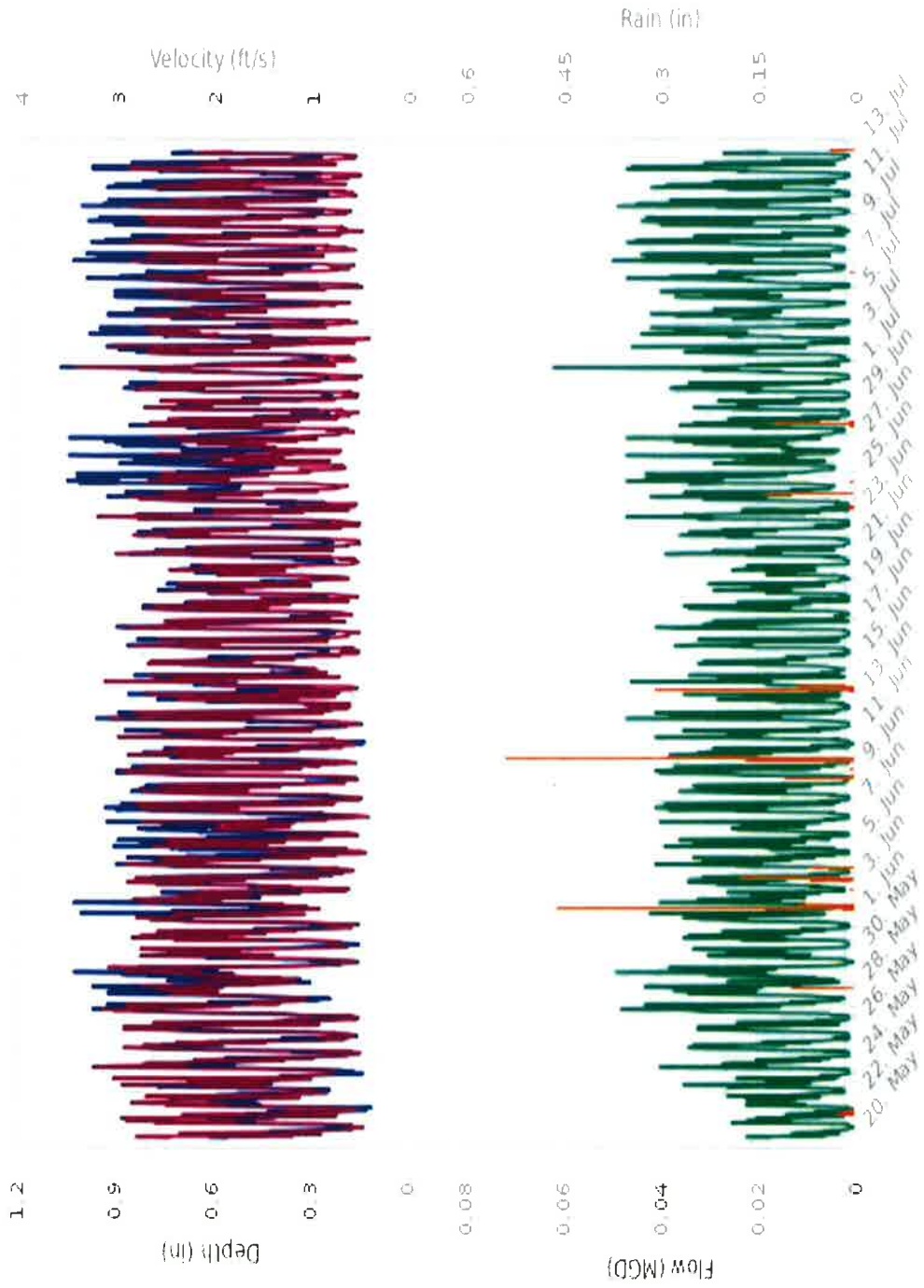
Percent Uptime	
Depth (in)	98.03
Velocity (ft/s)	98.03
Quantity (MGD - Total MG)	98.03





# Hydrograph Report

## M-1



Flow Monitor  
**M-1**

Pipe Height  
8.00  
ft

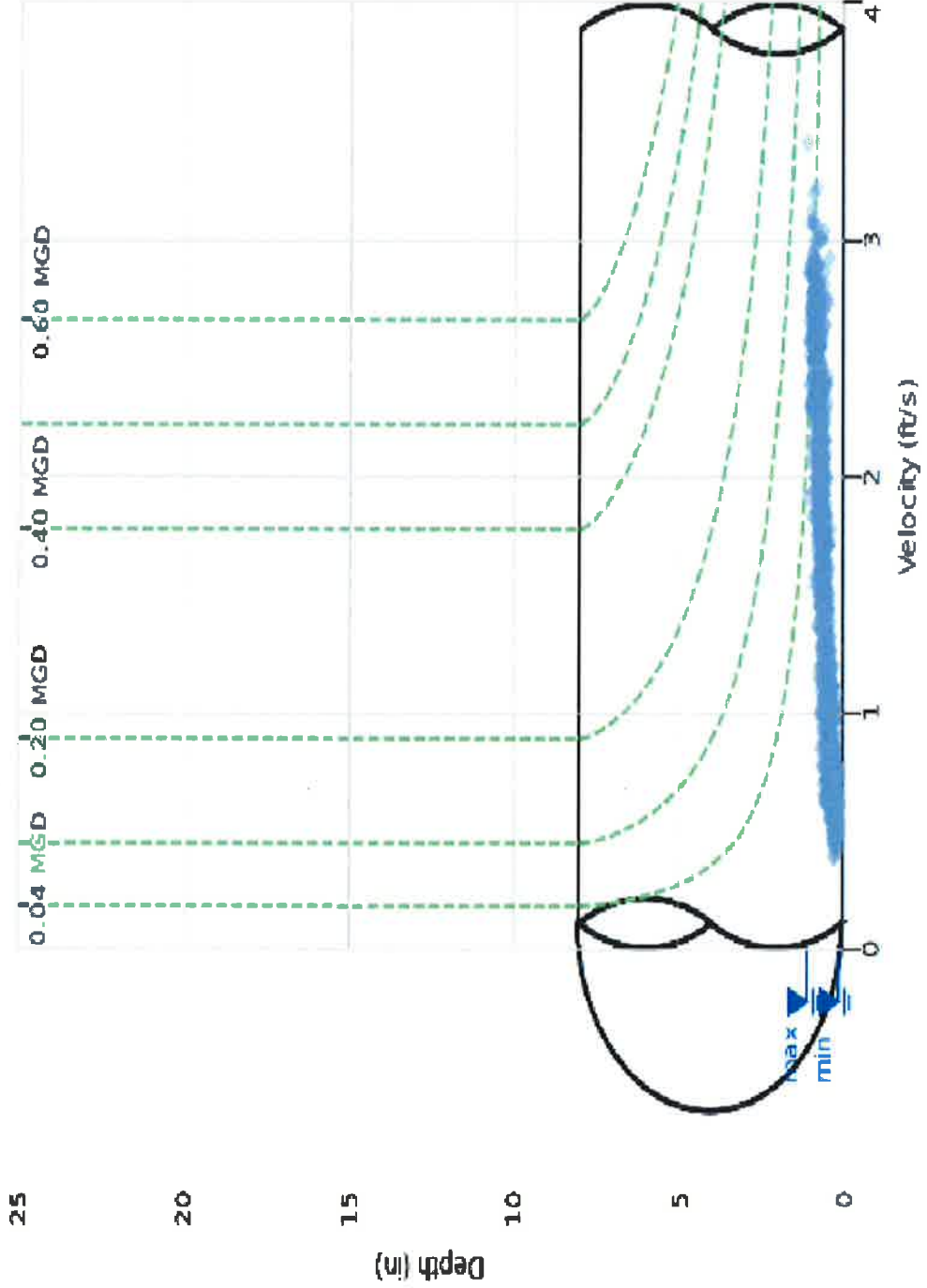
Report Period  
05/19/2022  
to  
07/12/2022

Legend  
Rain  
Quantity  
Depth  
Velocity



# Scattergraph Report

M-1



Flow Monitor  
**M-1**

Pipe Height  
8.00  
ft

Report Period  
03/19/2022  
To  
07/12/2022

Legend  
o Depth - Velocity  
--- Iso-Q  
▲ Min-Max Depth



## Daily Tabular Report

05/19/2022 12:00 - 07/12/2022 12:00  
M-1Pipe: Round (8 in H), Silt0.00 in

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
05/19/2022	22:40	0.20	16:20	0.82	0.42	22:40	0.43	12:15	3.42	1.55	22:40	0.001	16:20	0.038	0.009	0.005	-
05/20/2022	02:50	0.14	07:40	0.81	0.39	02:50	0.29	12:30	3.46	1.47	02:50	0.000	08:45	0.037	0.009	0.009	0.06
05/21/2022	04:15	0.00	15:25	0.93	0.45	23:05	0.33	09:20	3.41	1.71	04:15	0.000	15:25	0.049	0.012	0.012	0.01
05/22/2022	23:55	0.15	07:50	0.99	0.46	06:40	0.39	10:40	3.31	1.60	23:50	0.001	10:20	0.050	0.011	0.011	-
05/23/2022	01:45	0.11	08:40	0.93	0.43	22:50	0.31	11:15	3.48	1.65	03:35	0.000	08:40	0.051	0.012	0.012	-
05/24/2022	03:20	0.12	05:40	1.04	0.46	05:30	0.29	13:20	3.57	1.51	03:20	0.000	13:20	0.056	0.012	0.012	-
05/25/2022	02:35	0.13	13:35	0.84	0.45	04:35	0.35	10:45	3.52	1.54	03:10	0.000	10:45	0.044	0.012	0.012	-
05/26/2022	02:50	0.15	18:35	1.03	0.56	00:20	0.31	13:10	3.53	1.72	00:20	0.000	13:10	0.057	0.017	0.017	-
05/27/2022	02:55	0.18	16:25	1.31	0.62	00:30	0.30	08:30	3.36	1.75	00:30	0.001	16:25	0.071	0.018	0.018	0.10
05/28/2022	23:45	0.17	12:40	1.23	0.63	00:35	0.30	19:15	3.60	1.92	23:45	0.001	12:40	0.079	0.020	0.020	-
05/29/2022	04:00	0.13	18:45	0.92	0.47	03:50	0.29	10:55	3.42	1.49	03:50	0.000	10:50	0.048	0.012	0.012	-
05/30/2022	02:50	0.13	10:50	0.95	0.47	02:35	0.33	13:35	3.57	1.47	02:35	0.000	13:35	0.052	0.012	0.012	-
05/31/2022	03:00	0.17	18:30	1.17	0.54	04:40	0.37	10:40	3.33	1.57	04:05	0.001	18:30	0.057	0.015	0.015	0.02
06/01/2022	15:45	0.27	08:35	1.21	0.60	01:00	0.34	22:10	3.27	1.75	01:55	0.001	08:35	0.062	0.016	0.016	0.94
06/02/2022	23:45	0.22	18:20	1.09	0.54	23:40	0.33	10:55	3.36	1.61	23:40	0.001	18:20	0.059	0.015	0.015	0.38
06/03/2022	02:55	0.16	18:30	1.02	0.55	01:10	0.35	10:10	3.32	1.57	01:10	0.000	10:10	0.054	0.015	0.015	0.09
06/04/2022	04:40	0.18	10:20	1.08	0.57	02:20	0.29	10:20	3.42	1.31	04:40	0.000	10:20	0.062	0.013	0.013	-
06/05/2022	02:30	0.19	18:30	0.99	0.56	01:05	0.33	09:10	3.31	1.29	02:20	0.001	09:10	0.050	0.012	0.012	-
06/06/2022	03:00	0.16	13:50	1.12	0.55	02:20	0.27	16:25	3.55	1.37	00:15	0.000	13:55	0.065	0.014	0.014	-
06/07/2022	02:50	0.16	11:20	1.11	0.51	02:35	0.34	09:35	3.43	1.47	02:35	0.000	13:20	0.063	0.014	0.014	-
06/08/2022	03:55	0.12	13:50	1.11	0.52	03:55	0.34	19:05	3.37	1.52	03:55	0.000	13:50	0.063	0.015	0.015	0.19
06/09/2022	23:45	0.16	11:15	1.01	0.54	03:10	0.34	11:15	3.46	1.56	23:35	0.000	11:15	0.057	0.015	0.015	1.00
06/10/2022	01:05	0.00	10:05	0.97	0.49	00:15	0.32	10:40	3.43	1.42	01:05	0.000	10:45	0.052	0.013	0.013	-
06/11/2022	23:50	0.15	18:30	1.10	0.50	02:50	0.32	11:10	3.44	1.33	23:05	0.000	18:30	0.064	0.013	0.013	-
06/12/2022	06:25	0.20	10:55	1.03	0.47	02:10	0.34	13:50	3.34	1.25	06:20	0.001	10:55	0.055	0.010	0.010	0.11
06/13/2022	02:30	0.20	10:45	1.11	0.53	23:15	0.31	10:45	3.42	1.42	02:25	0.001	10:45	0.065	0.013	0.013	0.55
06/14/2022	23:25	0.20	10:10	1.10	0.49	23:55	0.27	10:10	3.49	1.40	23:55	0.001	10:10	0.065	0.011	0.011	-
06/15/2022	02:25	0.20	09:05	1.01	0.48	03:05	0.31	10:15	3.38	1.34	02:25	0.001	11:20	0.053	0.012	0.012	-
06/16/2022	06:30	0.20	11:20	1.06	0.48	15:20	0.36	13:45	3.43	1.47	04:20	0.001	13:45	0.058	0.013	0.013	-
06/17/2022	20:15	0.21	13:25	1.07	0.49	05:05	0.39	22:00	3.47	1.41	05:05	0.001	13:25	0.061	0.012	0.012	-
06/18/2022	20:05	0.22	10:40	1.01	0.47	02:30	0.33	18:25	3.43	1.38	02:30	0.001	10:40	0.055	0.011	0.011	-
06/19/2022	22:10	0.21	16:25	0.92	0.44	03:05	0.35	14:00	3.52	1.27	22:40	0.001	14:00	0.049	0.010	0.010	-
06/20/2022	00:00	0.20	10:50	0.93	0.49	23:30	0.36	10:50	3.37	1.33	00:00	0.001	10:50	0.050	0.011	0.011	-
06/21/2022	02:40	0.20	15:25	1.00	0.51	23:20	0.33	15:25	3.38	1.49	23:20	0.001	15:25	0.055	0.014	0.014	-
06/22/2022	00:55	0.20	11:20	1.02	0.50	02:25	0.36	11:15	3.65	1.53	05:00	0.001	11:15	0.060	0.014	0.014	0.02
06/23/2022	00:05	0.20	19:00	1.16	0.57	00:10	0.31	09:15	3.42	1.51	00:05	0.001	19:00	0.064	0.014	0.014	0.15
06/24/2022	01:55	0.41	19:15	1.24	0.77	02:10	0.29	19:15	3.49	1.53	02:10	0.002	19:15	0.077	0.021	0.021	0.01
06/25/2022	23:15	0.32	19:30	1.19	0.68	03:15	0.33	19:30	3.34	1.32	23:10	0.001	19:30	0.070	0.015	0.015	-
06/26/2022	01:55	0.27	18:35	1.26	0.71	23:40	0.35	18:35	3.39	1.41	01:55	0.001	18:35	0.077	0.017	0.017	-
06/27/2022	23:35	0.21	10:40	0.96	0.54	03:15	0.29	19:10	3.33	1.40	23:35	0.001	10:40	0.051	0.013	0.013	0.15
06/28/2022	23:10	0.20	13:40	0.95	0.50	03:00	0.40	13:40	3.46	1.48	23:10	0.001	13:40	0.052	0.013	0.013	-
06/29/2022	04:30	0.20	13:30	1.10	0.49	01:05	0.31	13:30	3.54	1.47	01:05	0.001	13:30	0.066	0.014	0.014	-
06/30/2022	23:50	0.20	14:20	1.15	0.52	02:25	0.35	14:25	3.55	1.51	23:25	0.001	14:20	0.070	0.015	0.015	-
07/01/2022	22:25	0.20	16:00	1.11	0.54	00:50	0.33	19:05	3.51	1.57	22:25	0.001	19:05	0.058	0.015	0.015	-
07/02/2022	03:45	0.27	13:55	1.22	0.65	04:35	0.30	18:50	3.53	1.63	03:50	0.001	13:55	0.072	0.019	0.019	-
07/03/2022	02:30	0.24	07:15	1.36	0.62	02:20	0.40	17:20	3.46	1.65	03:15	0.001	07:15	0.070	0.018	0.018	-
07/04/2022	02:35	0.26	11:00	1.08	0.62	00:55	0.39	11:00	3.37	1.58	02:30	0.001	11:00	0.062	0.017	0.017	-
07/05/2022	02:40	0.25	11:05	1.26	0.61	02:20	0.33	11:05	3.48	1.59	02:20	0.001	11:05	0.079	0.018	0.018	0.01
07/06/2022	04:20	0.28	13:45	1.22	0.64	03:05	0.34	13:50	3.38	1.66	03:05	0.001	13:45	0.072	0.020	0.020	-
07/07/2022	23:55	0.26	10:45	1.19	0.58	03:25	0.39	13:45	3.52	1.57	03:25	0.001	13:40	0.073	0.017	0.017	-
07/08/2022	03:20	0.25	09:25	1.16	0.59	02:35	0.37	09:25	3.38	1.55	03:20	0.001	09:25	0.068	0.017	0.017	-
07/09/2022	04:40	0.24	10:20	1.17	0.57	23:20	0.41	10:20	3.50	1.41	03:00	0.001	10:20	0.071	0.015	0.015	-
07/10/2022	04:00	0.23	11:05	1.12	0.53	15:45	0.30	11:05	3.42	1.27	04:00	0.001	11:05	0.066	0.013	0.013	-
07/11/2022	04:35	0.24	10:50	1.14	0.60	02:55	0.37	13:50	3.46	1.48	04:35	0.001	10:55	0.067	0.016	0.016	-
07/12/2022	02:05	0.24	07:25	1.01	0.43	03:20	0.38	07:20	3.28	1.02	03:20	0.001	07:20	0.054	0.008	0.003	0.04

05/19/2022 12:00 - 07/12/2022 12:00

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)	Rain (in)
Total			0.763	3.83
Average	0.54	1.50	0.014	

## M-2

## Site Commentary

## SITE INFORMATION

Pipe	Round (8 in H)
Silt	0.00 (in)

## OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022**, along with observed minimum and maximum data, are provided in the following table.

REPLACE OTHER SITE OBSERVATIONS HERE

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Average	1.28	2.42	0.056
Minimum	1.21	0.53	0.012
Maximum	1.74	5.54	0.129
Min Time	05/30/2022 03:00:00	06/10/2022 02:00:00	06/12/2022 01:00:00
Max Time	05/27/2022 02:00:00	06/22/2022 10:00:00	06/22/2022 10:00:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the one-hour average.

## DATA UPTIME

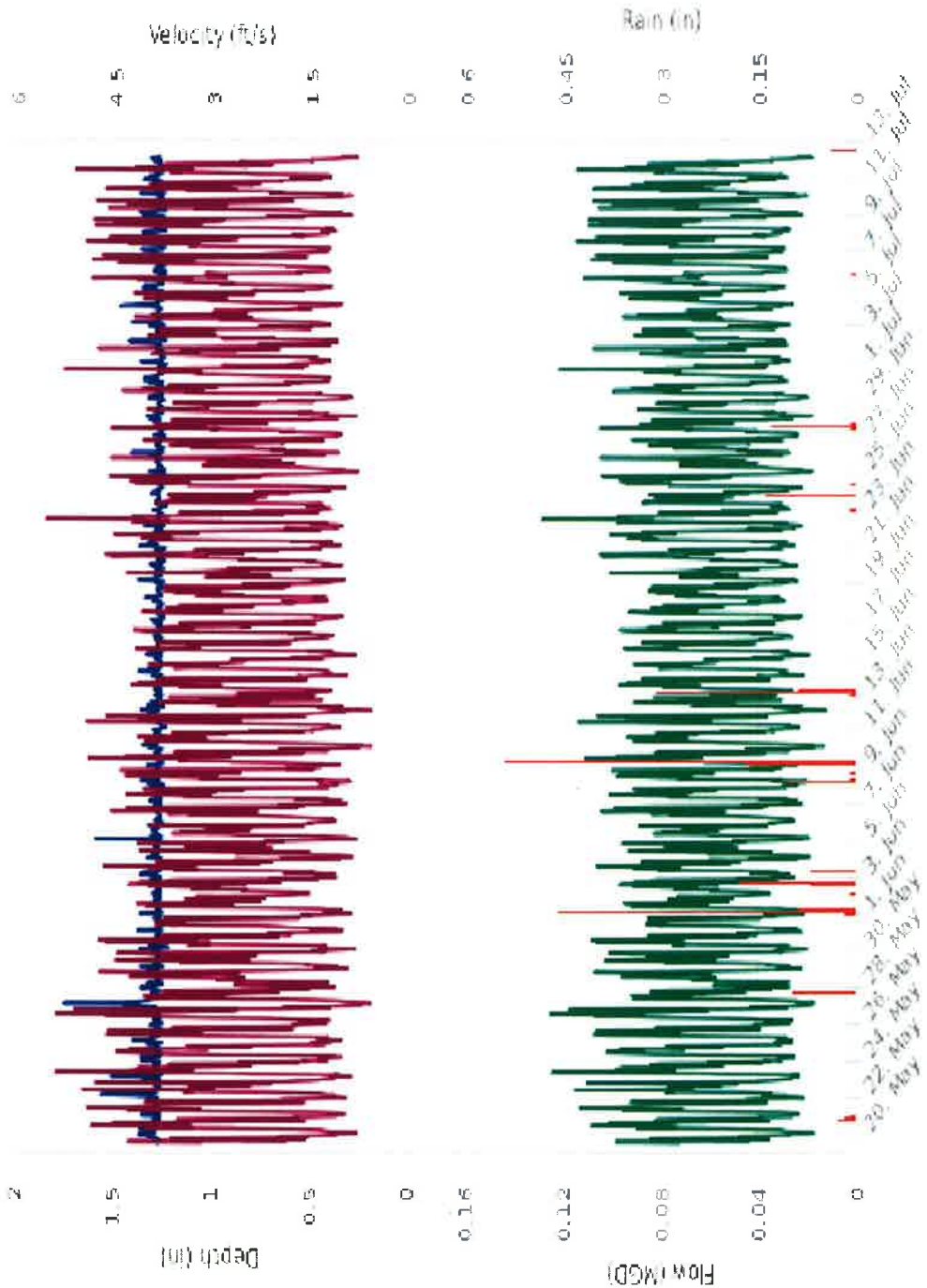
Data uptime observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022** is provided in the following table:

Percent Uptime	
Depth (in)	97.652
Velocity (ft/s)	97.652
Quantity (MGD - Total MG)	97.652





# Hydrograph Report M-2



Flow Monitor  
**M-2**

Pipe Height  
8.00  
ft

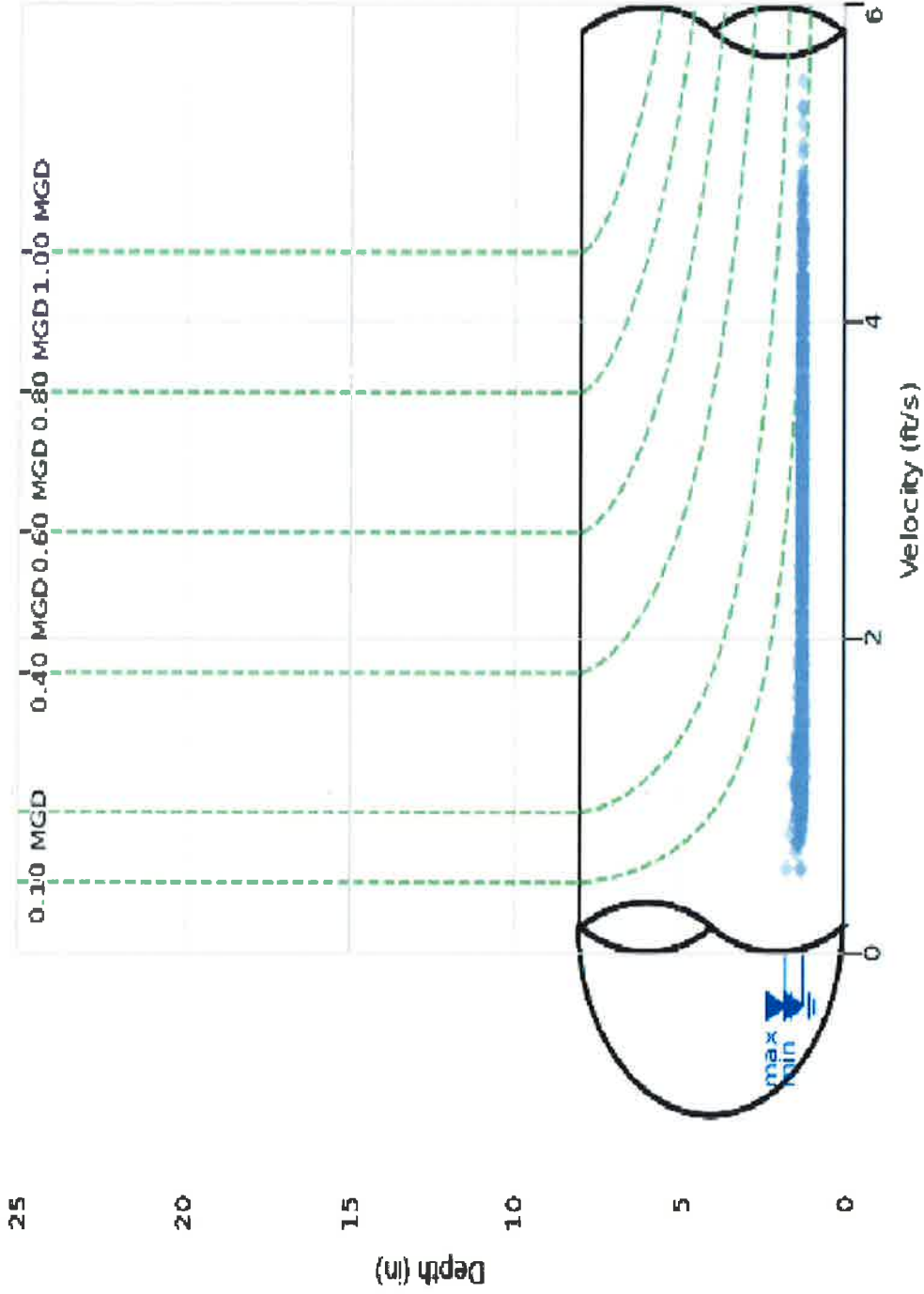
Report Period  
05/19/2022  
to  
07/12/2022

Legend  
Rain  
Quantity  
Depth  
Velocity



# Scattergraph Report

M-2



Flow Monitor  
**M-2**

Pipe Height  
8.00  
ft

Report Period  
05/19/2022  
To  
07/12/2022

Legend  
 ○ Depth - Velocity  
 --- Iso-Q<sup>1.48</sup>  
 ▽ Min-Max Depth





## Daily Tabular Report

05/19/2022 12:00 - 07/12/2022 12:00  
M-2Pipe: Round (8 in H), Silt0.00 in

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
05/19/2022	17:30	1.23	23:40	1.58	1.29	23:05	0.78	16:20	6.43	2.40	23:05	0.018	16:20	0.147	0.056	0.028	-
05/20/2022	09:35	1.22	06:00	1.60	1.27	01:40	0.46	13:35	7.15	2.46	01:40	0.011	13:35	0.165	0.056	0.056	0.06
05/21/2022	07:25	1.22	02:40	1.67	1.27	02:05	0.61	09:20	6.55	2.68	02:30	0.015	09:20	0.148	0.062	0.062	0.01
05/22/2022	23:30	1.21	02:50	2.54	1.30	22:45	0.46	18:20	6.45	2.40	00:55	0.018	18:20	0.148	0.056	0.056	-
05/23/2022	06:05	1.21	03:45	2.00	1.28	03:35	0.59	11:55	7.30	2.67	01:40	0.014	11:55	0.166	0.062	0.062	-
05/24/2022	21:05	1.21	21:10	1.92	1.28	03:25	0.60	12:20	6.42	2.47	03:25	0.015	14:15	0.149	0.057	0.057	-
05/25/2022	00:05	1.23	00:10	1.81	1.28	02:40	0.57	10:35	6.77	2.53	03:45	0.013	10:35	0.156	0.059	0.059	-
05/26/2022	00:15	1.21	23:50	2.00	1.28	23:35	0.30	18:25	7.24	2.59	23:35	0.008	18:25	0.168	0.060	0.060	-
05/27/2022	22:40	1.22	02:30	2.12	1.33	03:00	0.00	10:50	6.59	2.19	03:00	0.000	10:50	0.152	0.052	0.052	0.10
05/28/2022	00:05	1.21	00:45	1.81	1.27	01:05	0.74	12:45	6.40	2.58	06:25	0.017	12:45	0.145	0.059	0.059	-
05/29/2022	02:35	1.20	03:35	1.67	1.27	03:15	0.52	11:10	6.13	2.43	03:15	0.012	11:10	0.144	0.056	0.056	-
05/30/2022	03:00	1.19	02:40	2.13	1.27	03:00	0.44	13:30	6.87	2.38	03:00	0.009	13:30	0.160	0.054	0.054	-
05/31/2022	00:05	1.20	02:20	2.48	1.26	23:10	0.74	18:30	6.27	2.28	23:10	0.016	18:30	0.143	0.052	0.052	0.02
06/01/2022	00:10	1.21	00:20	1.83	1.27	00:25	0.64	13:15	6.48	2.44	01:15	0.015	13:15	0.149	0.056	0.056	0.94
06/02/2022	16:40	1.23	20:05	1.48	1.27	23:35	0.74	13:45	6.72	2.58	23:35	0.016	13:45	0.154	0.059	0.059	0.38
06/03/2022	22:25	1.22	02:30	1.58	1.27	03:25	0.57	14:25	6.66	2.52	03:25	0.013	14:25	0.153	0.058	0.058	0.09
06/04/2022	23:50	1.22	00:35	1.99	1.27	02:55	0.49	18:35	6.56	2.21	02:05	0.011	18:35	0.153	0.051	0.051	-
06/05/2022	01:35	1.21	01:25	2.23	1.28	03:05	0.52	10:15	5.76	2.11	03:05	0.012	10:15	0.133	0.049	0.049	-
06/06/2022	03:00	1.20	02:50	1.91	1.27	00:15	0.63	13:10	6.62	2.38	00:15	0.014	13:10	0.151	0.055	0.055	-
06/07/2022	23:05	1.22	04:40	1.48	1.27	03:45	0.62	10:30	6.44	2.40	03:45	0.014	10:30	0.147	0.055	0.055	-
06/08/2022	05:20	1.19	05:10	2.21	1.27	03:35	0.54	10:20	7.27	2.43	03:35	0.012	10:20	0.166	0.056	0.056	0.19
06/09/2022	02:50	1.22	00:15	1.84	1.27	20:35	0.71	11:10	6.60	2.58	20:35	0.016	11:10	0.151	0.059	0.059	1.00
06/10/2022	09:10	1.22	04:50	2.00	1.28	02:35	0.37	09:50	6.57	2.36	02:35	0.008	09:50	0.149	0.054	0.054	-
06/11/2022	03:25	1.20	22:00	1.60	1.27	02:50	0.47	11:15	6.98	2.27	02:50	0.011	11:10	0.161	0.052	0.052	-
06/12/2022	04:05	1.21	02:05	2.04	1.27	01:55	0.38	10:45	6.41	2.02	01:55	0.009	11:45	0.149	0.047	0.047	0.11
06/13/2022	09:25	1.23	21:25	1.55	1.26	23:25	0.52	11:15	6.18	2.42	23:25	0.012	11:15	0.140	0.055	0.055	0.55
06/14/2022	23:25	1.21	03:50	1.74	1.28	04:05	0.58	10:10	6.12	2.24	04:05	0.015	10:10	0.140	0.052	0.052	-
06/15/2022	22:55	1.23	02:35	1.53	1.27	06:10	0.56	11:20	6.52	2.26	01:20	0.013	10:20	0.150	0.052	0.052	-
06/16/2022	00:50	1.21	02:10	1.35	1.27	17:45	0.77	10:45	6.66	2.42	17:25	0.017	10:45	0.153	0.056	0.056	-
06/17/2022	04:20	1.21	00:05	1.60	1.26	01:00	0.60	08:00	6.49	2.35	01:00	0.014	08:00	0.147	0.054	0.054	-
06/18/2022	01:50	1.20	04:35	1.50	1.27	20:40	0.79	07:50	5.79	2.41	20:40	0.018	07:50	0.131	0.055	0.055	-
06/19/2022	23:00	1.21	22:10	1.92	1.28	03:05	0.45	13:15	7.01	2.14	03:05	0.011	13:15	0.168	0.050	0.050	-
06/20/2022	21:05	1.21	23:15	2.44	1.27	23:55	0.71	13:05	7.02	2.53	23:55	0.015	13:05	0.160	0.058	0.058	-
06/21/2022	00:00	1.22	03:50	1.84	1.28	22:55	0.68	15:55	6.72	2.57	22:55	0.016	15:55	0.150	0.059	0.059	-
06/22/2022	01:30	1.21	02:05	1.80	1.27	06:25	0.68	10:40	7.04	2.57	06:25	0.015	10:40	0.161	0.059	0.059	0.02
06/23/2022	04:50	1.20	20:30	1.49	1.27	04:00	0.49	09:25	6.34	2.35	04:00	0.011	09:25	0.143	0.054	0.054	0.15
06/24/2022	23:25	1.22	02:35	1.33	1.26	23:45	0.70	10:45	7.30	2.55	23:45	0.015	10:45	0.171	0.059	0.059	0.01
06/25/2022	03:20	1.20	01:45	1.51	1.27	01:35	0.60	19:35	6.37	2.22	01:35	0.014	19:35	0.147	0.051	0.051	-
06/26/2022	23:40	1.21	01:30	1.80	1.27	01:30	0.58	18:35	5.91	2.28	01:25	0.015	18:35	0.136	0.052	0.052	-
06/27/2022	23:10	1.22	23:50	1.72	1.27	00:45	0.70	11:40	6.78	2.33	23:05	0.016	11:40	0.153	0.054	0.054	0.15
06/28/2022	03:15	1.21	03:25	1.58	1.27	02:40	0.53	09:30	6.20	2.31	02:40	0.012	09:30	0.139	0.053	0.053	-
06/29/2022	04:15	1.22	00:10	1.85	1.27	03:20	0.37	11:05	6.76	2.37	03:20	0.008	11:05	0.154	0.054	0.054	-
06/30/2022	04:35	1.20	04:15	2.20	1.28	23:05	0.73	14:00	6.69	2.42	23:05	0.017	14:00	0.157	0.056	0.056	-
07/01/2022	02:40	1.22	00:30	1.77	1.27	01:55	0.68	18:30	6.37	2.45	01:55	0.016	18:30	0.146	0.056	0.056	-
07/02/2022	05:25	1.21	03:30	1.82	1.29	01:45	0.64	15:50	6.09	2.53	02:50	0.015	15:50	0.142	0.059	0.059	-
07/03/2022	00:55	1.21	04:25	1.97	1.28	22:40	0.76	10:50	5.90	2.35	04:55	0.017	10:50	0.134	0.055	0.055	-
07/04/2022	20:30	1.23	01:10	2.01	1.29	01:05	0.66	18:55	6.44	2.45	01:25	0.016	18:55	0.150	0.057	0.057	-
07/05/2022	21:55	1.21	04:35	2.17	1.28	04:10	0.66	11:05	6.37	2.61	04:10	0.016	11:05	0.147	0.060	0.060	0.01
07/06/2022	01:30	1.22	23:55	1.50	1.26	02:15	0.77	13:50	6.18	2.72	02:15	0.017	13:35	0.142	0.062	0.062	-
07/07/2022	16:55	1.22	04:05	1.67	1.28	04:30	0.80	14:30	6.54	2.66	04:30	0.018	18:30	0.153	0.062	0.062	-
07/08/2022	05:00	1.22	03:10	1.69	1.28	06:00	0.80	11:35	5.94	2.54	06:00	0.018	11:35	0.137	0.059	0.059	-
07/09/2022	07:55	1.23	00:50	1.78	1.28	00:35	0.55	10:25	6.13	2.42	00:35	0.013	10:25	0.141	0.056	0.056	-
07/10/2022	05:45	1.22	04:35	1.74	1.28	01:35	0.76	10:25	6.49	2.41	01:35	0.017	10:25	0.149	0.056	0.056	-
07/11/2022	06:20	1.22	06:55	1.53	1.27	23:15	0.77	10:55	6.33	2.75	23:15	0.019	10:55	0.143	0.063	0.063	-
07/12/2022	00:05	1.22	02:15	1.44	1.28	04:00	0.49	04:20	1.94	1.09	04:00	0.012	04:20	0.045	0.025	0.005	0.04

05/19/2022 12:00 - 07/12/2022 12:00

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)	Rain (in)
<b>Total</b>			2.998	3.83
<b>Average</b>	1.28	2.42	0.056	



## M-3

## Site Commentary

## SITE INFORMATION

Pipe	Round (7.75 in H)
Silt	0.00 (in)

## OBSERVATIONS

Average flow depth, velocity, and quantity data observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022**, along with observed minimum and maximum data, are provided in the following table.

REPLACE OTHER SITE OBSERVATIONS HERE

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Average	1.47	2.20	0.061
Minimum	1.28	0.51	0.013
Maximum	1.87	4.20	0.130
Min Time	06/27/2022 23:00:00	06/14/2022 03:00:00	05/30/2022 02:00:00
Max Time	06/10/2022 04:00:00	06/20/2022 10:00:00	06/09/2022 18:00:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the one-hour average.

## DATA UPTIME

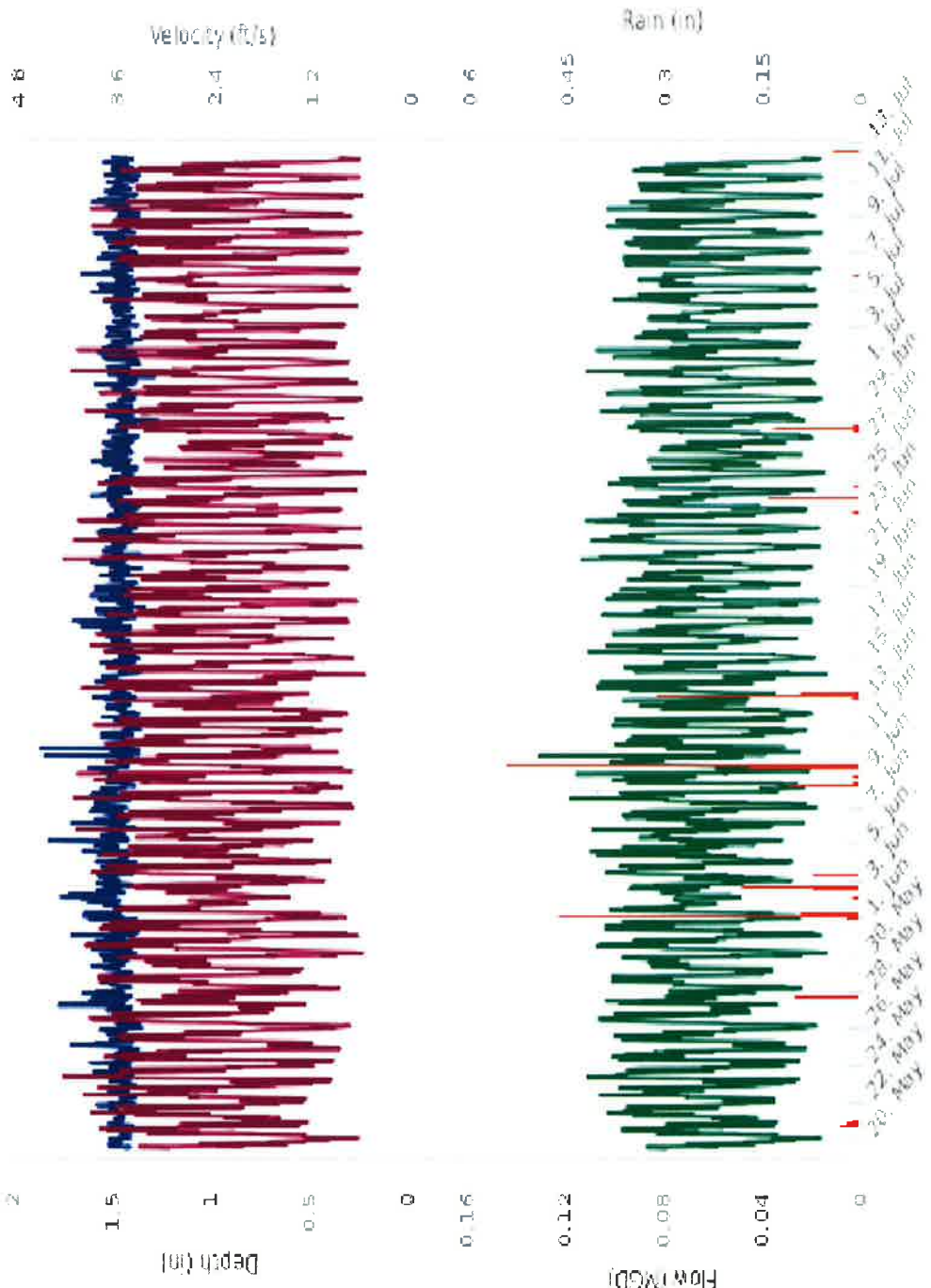
Data uptime observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022** is provided in the following table:

Percent Uptime	
Depth (in)	97.633
Velocity (ft/s)	97.633
Quantity (MGD - Total MG)	97.633



# Hydrograph Report

## M-3



Flow Monitor  
**M-3**

Pipe Height  
7.75  
in

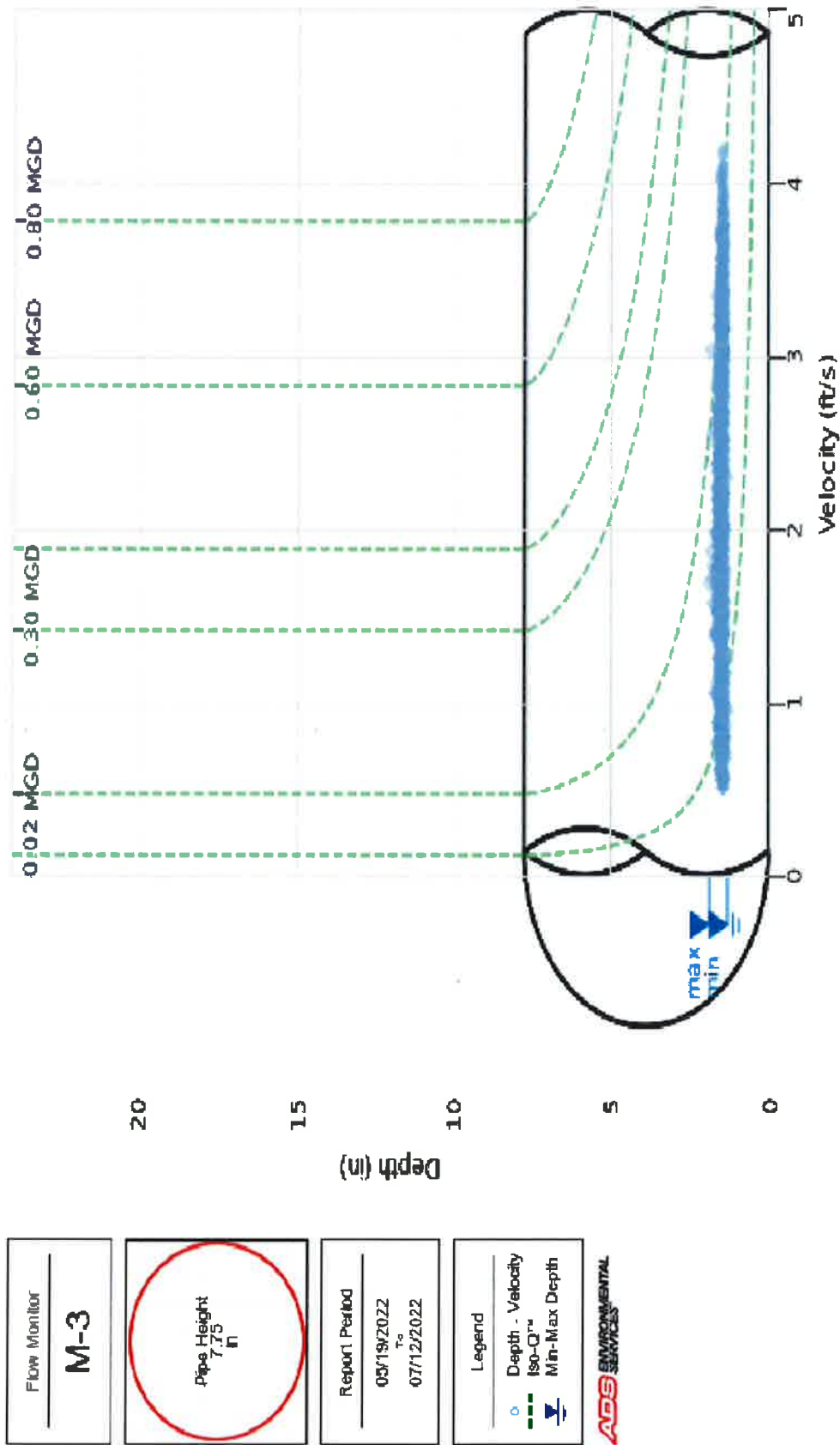
Report Period  
05/19/2022  
to  
07/12/2022

Legend  
█ Rain  
█ Quantity  
█ Depth  
█ Velocity



# Scattergraph Report

M-3



Flow Monitor  
**M-3**

Pipe Height  
7.75  
ft

Report Period  
03/19/2022  
To  
07/12/2022

Legend  
○ Depth - Velocity  
--- Iso-Q<sup>TM</sup>  
▼ Min-Max Depth





## Daily Tabular Report

05/19/2022 12:00 - 07/12/2022 12:00  
M-3Pipe: Round (7.75 in H), Silt0.00 in

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
05/19/2022	12:55	1.38	22:55	1.66	1.46	23:05	0.42	13:30	4.42	2.04	23:05	0.011	13:30	0.114	0.056	0.028	-
05/20/2022	12:10	1.36	00:50	1.78	1.43	23:40	0.10	14:00	5.17	2.11	23:40	0.003	14:00	0.135	0.056	0.056	0.06
05/21/2022	23:35	1.36	20:40	1.72	1.47	01:25	0.16	15:00	5.11	2.56	01:25	0.004	15:00	0.149	0.071	0.071	0.01
05/22/2022	06:50	1.34	19:15	2.35	1.44	04:30	0.31	15:35	5.26	2.32	04:30	0.008	19:15	0.161	0.063	0.063	-
05/23/2022	17:05	1.34	15:45	2.33	1.44	00:00	0.16	14:10	5.11	2.51	00:00	0.004	09:40	0.138	0.068	0.068	-
05/24/2022	20:55	1.34	03:05	1.97	1.45	04:45	0.15	14:20	4.73	2.20	04:45	0.004	03:05	0.133	0.061	0.061	-
05/25/2022	23:35	1.28	21:10	3.05	1.49	04:45	0.10	11:25	5.11	2.24	04:45	0.004	04:40	0.151	0.063	0.063	-
05/26/2022	04:55	1.24	02:00	1.91	1.43	23:50	0.43	11:15	4.73	2.30	23:50	0.013	11:15	0.136	0.062	0.062	-
05/27/2022	18:15	1.36	17:10	2.55	1.51	02:30	0.11	09:55	4.87	2.23	02:30	0.003	11:45	0.154	0.064	0.064	0.10
05/28/2022	05:50	1.35	11:55	2.39	1.47	04:45	0.13	18:25	4.73	2.37	04:45	0.004	18:25	0.132	0.066	0.066	-
05/29/2022	00:50	1.35	04:45	2.20	1.48	03:55	0.28	09:50	5.08	2.28	03:55	0.009	04:45	0.226	0.064	0.064	-
05/30/2022	03:50	1.35	00:30	1.98	1.47	04:25	0.36	10:55	4.90	2.23	04:25	0.010	09:40	0.138	0.062	0.062	-
05/31/2022	05:15	1.34	01:20	2.17	1.45	23:30	0.34	09:00	5.88	2.20	23:30	0.009	09:00	0.154	0.060	0.060	0.02
06/01/2022	04:15	1.34	01:50	2.36	1.52	01:25	0.39	08:30	4.75	2.22	01:55	0.010	08:30	0.130	0.064	0.064	0.94
06/02/2022	19:20	1.37	03:25	2.32	1.53	23:35	0.41	19:20	4.39	2.31	23:35	0.011	14:55	0.129	0.068	0.068	0.38
06/03/2022	17:55	1.33	17:45	2.22	1.48	02:25	0.13	10:15	4.68	2.48	02:25	0.003	02:10	0.157	0.070	0.070	0.09
06/04/2022	14:50	1.28	22:45	2.75	1.50	03:25	0.13	14:30	4.83	2.22	03:40	0.004	14:40	0.223	0.064	0.064	-
06/05/2022	20:50	1.35	19:40	2.07	1.50	04:25	0.35	12:25	5.98	2.22	04:25	0.009	12:25	0.189	0.064	0.064	-
06/06/2022	00:35	1.34	00:15	2.47	1.52	01:05	0.32	11:00	4.83	2.31	01:45	0.011	00:15	0.225	0.067	0.067	-
06/07/2022	23:25	1.33	23:20	2.12	1.51	22:45	0.31	12:15	4.96	2.17	22:45	0.009	11:20	0.139	0.062	0.062	-
06/08/2022	07:25	1.28	01:35	2.08	1.46	04:00	0.11	11:20	5.26	2.25	04:00	0.003	07:30	0.147	0.063	0.063	0.19
06/09/2022	11:45	1.24	18:25	2.27	1.49	23:50	0.31	14:10	5.48	2.35	23:50	0.008	18:35	0.215	0.068	0.068	1.00
06/10/2022	05:45	1.34	04:15	2.62	1.48	02:05	0.11	11:35	4.72	2.26	02:05	0.003	04:45	0.262	0.064	0.064	-
06/11/2022	11:50	1.23	00:10	2.23	1.45	22:25	0.18	18:55	5.13	2.06	22:25	0.007	18:55	0.172	0.057	0.057	-
06/12/2022	16:50	1.20	10:30	2.22	1.46	01:20	0.16	16:25	5.43	2.02	01:20	0.004	10:30	0.181	0.056	0.056	0.11
06/13/2022	00:10	1.29	19:35	2.35	1.47	23:20	0.32	18:25	5.00	2.38	23:20	0.009	18:15	0.177	0.066	0.066	0.55
06/14/2022	15:25	1.26	00:45	2.12	1.45	04:10	0.14	12:05	4.95	2.13	04:10	0.003	01:40	0.152	0.058	0.058	-
06/15/2022	21:05	1.23	09:55	1.85	1.45	02:15	0.32	09:40	5.46	2.18	02:35	0.008	09:40	0.144	0.061	0.061	-
06/16/2022	15:10	1.25	17:40	2.39	1.49	23:30	0.32	09:45	4.62	2.19	23:30	0.008	14:05	0.124	0.062	0.062	-
06/17/2022	20:25	1.00	01:35	2.22	1.47	03:20	0.15	09:00	5.23	2.19	02:55	0.004	03:15	0.186	0.061	0.061	-
06/18/2022	19:45	1.35	06:05	2.09	1.49	03:30	0.36	17:30	5.30	2.22	03:30	0.009	06:20	0.151	0.064	0.064	-
06/19/2022	02:45	1.15	00:30	2.42	1.46	23:40	0.29	11:15	4.80	2.12	01:45	0.008	00:30	0.251	0.060	0.060	-
06/20/2022	00:55	1.30	17:00	1.97	1.49	00:50	0.15	13:05	5.37	2.31	00:50	0.004	13:05	0.146	0.066	0.066	-
06/21/2022	05:05	1.35	14:45	1.84	1.47	00:40	0.29	08:20	5.63	2.25	00:40	0.008	08:20	0.159	0.062	0.062	-
06/22/2022	15:10	1.34	01:10	2.09	1.44	03:05	0.33	14:40	5.03	2.30	03:05	0.008	15:30	0.152	0.063	0.063	0.02
06/23/2022	01:45	1.34	01:30	2.22	1.47	02:40	0.14	07:55	5.04	2.19	02:40	0.006	02:35	0.180	0.062	0.062	0.15
06/24/2022	00:20	1.34	00:00	2.00	1.47	03:55	0.35	08:45	4.74	2.32	05:05	0.010	08:45	0.130	0.065	0.065	0.01
06/25/2022	16:55	1.21	17:00	1.91	1.47	04:15	0.26	07:20	5.10	1.80	04:15	0.007	07:20	0.138	0.050	0.050	-
06/26/2022	19:25	1.19	22:00	1.90	1.47	02:05	0.39	12:15	4.53	1.88	02:05	0.010	09:20	0.131	0.053	0.053	-
06/27/2022	11:20	0.94	09:15	1.88	1.44	21:25	0.30	12:30	4.82	2.07	20:50	0.009	11:40	0.145	0.057	0.057	0.15
06/28/2022	07:25	1.34	03:40	2.09	1.46	04:00	0.16	10:25	5.12	2.17	04:00	0.004	10:25	0.139	0.060	0.060	-
06/29/2022	22:55	1.25	00:25	2.12	1.46	02:30	0.15	08:10	5.14	2.04	22:55	0.004	08:10	0.133	0.056	0.056	-
06/30/2022	02:40	1.03	20:45	1.86	1.44	02:05	0.14	10:20	4.80	2.16	02:05	0.004	10:20	0.135	0.058	0.058	-
07/01/2022	19:35	1.34	09:25	1.89	1.46	05:25	0.17	13:30	5.07	2.23	05:25	0.005	13:30	0.174	0.062	0.062	-
07/02/2022	19:30	0.95	04:15	1.99	1.46	03:05	0.16	10:50	4.90	2.17	03:05	0.004	04:15	0.135	0.060	0.060	-
07/03/2022	14:35	1.01	00:05	2.00	1.46	04:25	0.18	13:40	4.54	2.09	04:25	0.005	16:35	0.124	0.058	0.058	-
07/04/2022	18:35	1.14	20:50	1.96	1.47	02:10	0.14	10:55	5.25	2.20	02:10	0.004	13:05	0.182	0.061	0.061	-
07/05/2022	08:25	1.35	22:55	1.89	1.49	02:45	0.30	05:50	4.76	2.18	02:45	0.008	05:50	0.122	0.062	0.062	0.01
07/06/2022	02:10	1.35	16:40	1.92	1.47	03:35	0.13	08:30	4.74	2.18	03:35	0.003	14:10	0.132	0.061	0.061	-
07/07/2022	09:55	1.29	23:15	2.55	1.47	01:50	0.30	13:50	4.58	2.15	01:50	0.008	08:50	0.124	0.060	0.060	-
07/08/2022	15:40	1.11	01:20	2.38	1.45	01:05	0.18	08:15	5.64	2.19	01:05	0.007	08:15	0.152	0.060	0.060	-
07/09/2022	07:10	1.20	20:05	1.90	1.47	03:05	0.11	14:10	4.68	2.05	03:05	0.004	08:00	0.125	0.057	0.057	-
07/10/2022	20:40	1.12	05:15	1.87	1.47	00:45	0.34	14:25	4.71	1.95	03:45	0.009	14:25	0.136	0.055	0.055	-
07/11/2022	04:50	1.23	02:15	1.84	1.46	03:55	0.36	08:45	4.57	2.12	03:55	0.009	08:45	0.125	0.059	0.059	-
07/12/2022	02:00	1.28	02:05	1.89	1.45	03:30	0.29	04:00	2.44	0.76	03:25	0.007	03:05	0.069	0.021	0.004	0.04

05/19/2022 12:00 - 07/12/2022 12:00

	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)	Rain (in)
Total			3.297	3.83
Average	1.47	2.20	0.061	

**M-4**

**Site Commentary**

**SITE INFORMATION**

Pipe	Round (8 in H)
Silt	0.00 (in)

**OBSERVATIONS**

Average flow depth, velocity, and quantity data observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022**, along with observed minimum and maximum data, are provided in the following table.

REPLACE OTHER SITE OBSERVATIONS HERE

Observed Flow Conditions			
Item	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)
Average	1.32	1.75	0.042
Minimum	1.22	0.35	0.008
Maximum	2.04	3.06	0.092
Min Time	06/04/2022 05:00:00	07/02/2022 03:00:00	06/01/2022 02:00:00
Max Time	06/25/2022 05:00:00	05/20/2022 09:00:00	05/20/2022 09:00:00

Based upon the quality and consistency of the observed flow depth and velocity data, the Continuity equation was used to calculate flow rate and quantities during the monitoring period.

Values in the Observed Flow Conditions and data on the graphical reports are based on the one-hour average.

**DATA UPTIME**

Data uptime observed during **Thursday, 19 May 2022 to Tuesday, 12 July 2022** is provided in the following table:

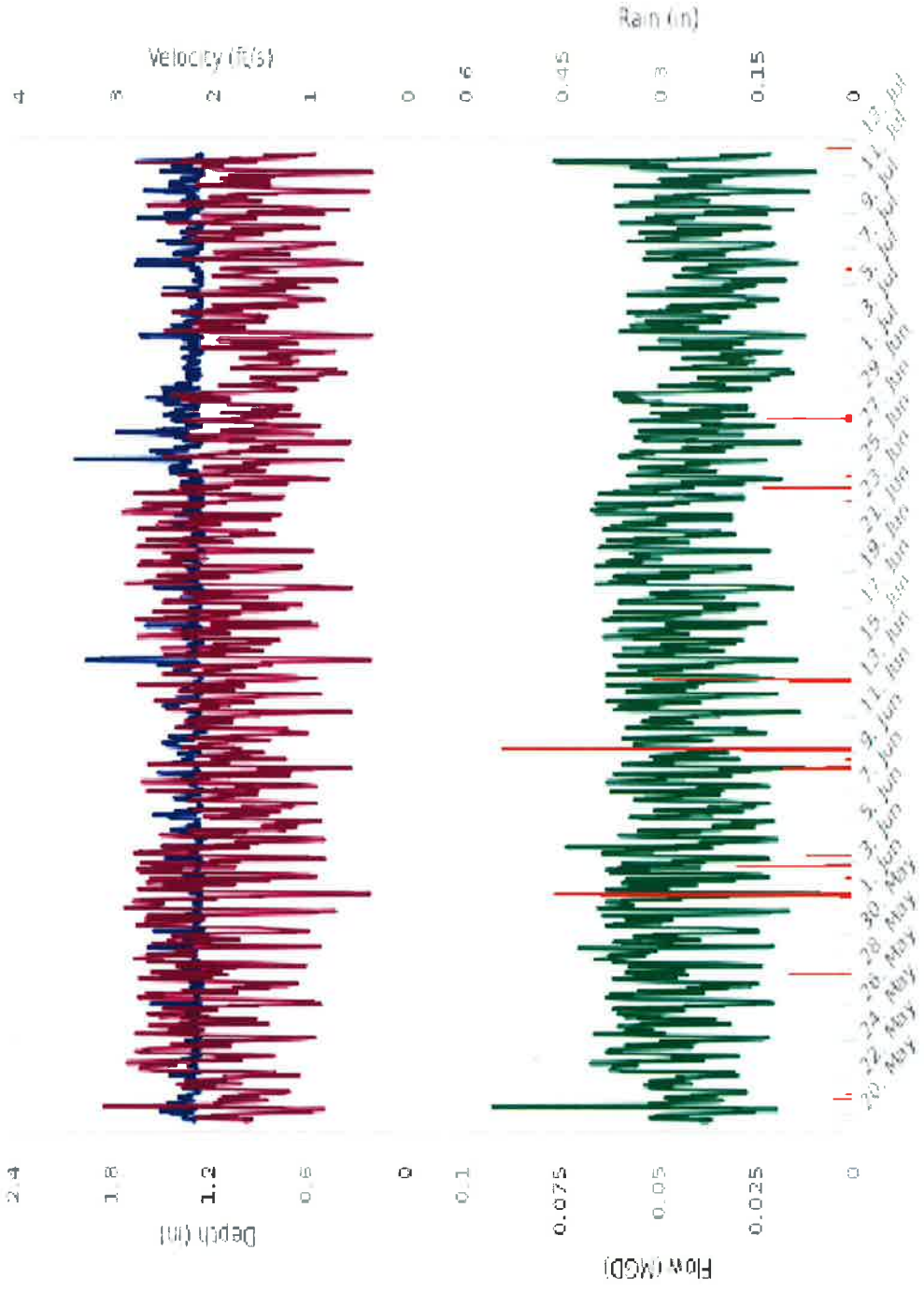
Percent Uptime	
Depth (in)	97.652
Velocity (ft/s)	97.652
Quantity (MGD - Total MG)	97.652





# Hydrograph Report

## M-4



Flow Monitor  
**M-4**

Pipe Height  
8.00  
ft

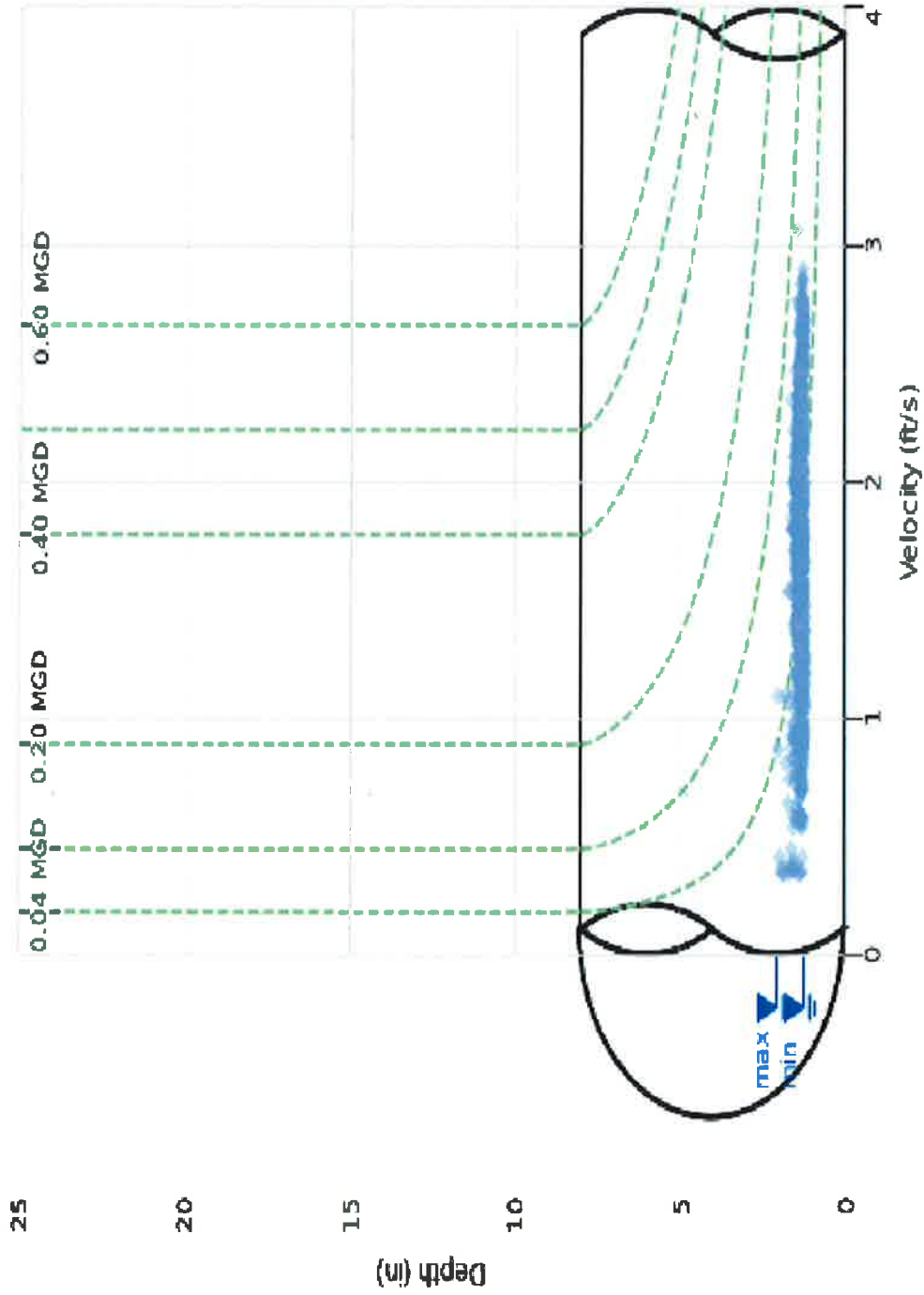
Report Period  
05/19/2022  
to  
07/12/2022

Legend  
█ Rain  
█ Quantity  
█ Depth  
█ Velocity





# Scattergraph Report M-4



Flow Monitor  
**M-4**

Pipe Height  
8.00  
ft

Report Period  
05/19/2022  
To  
07/12/2022

Legend  
○ Depth - Velocity  
--- ISO-Q10  
▲ Min-Max Depth



## Daily Tabular Report

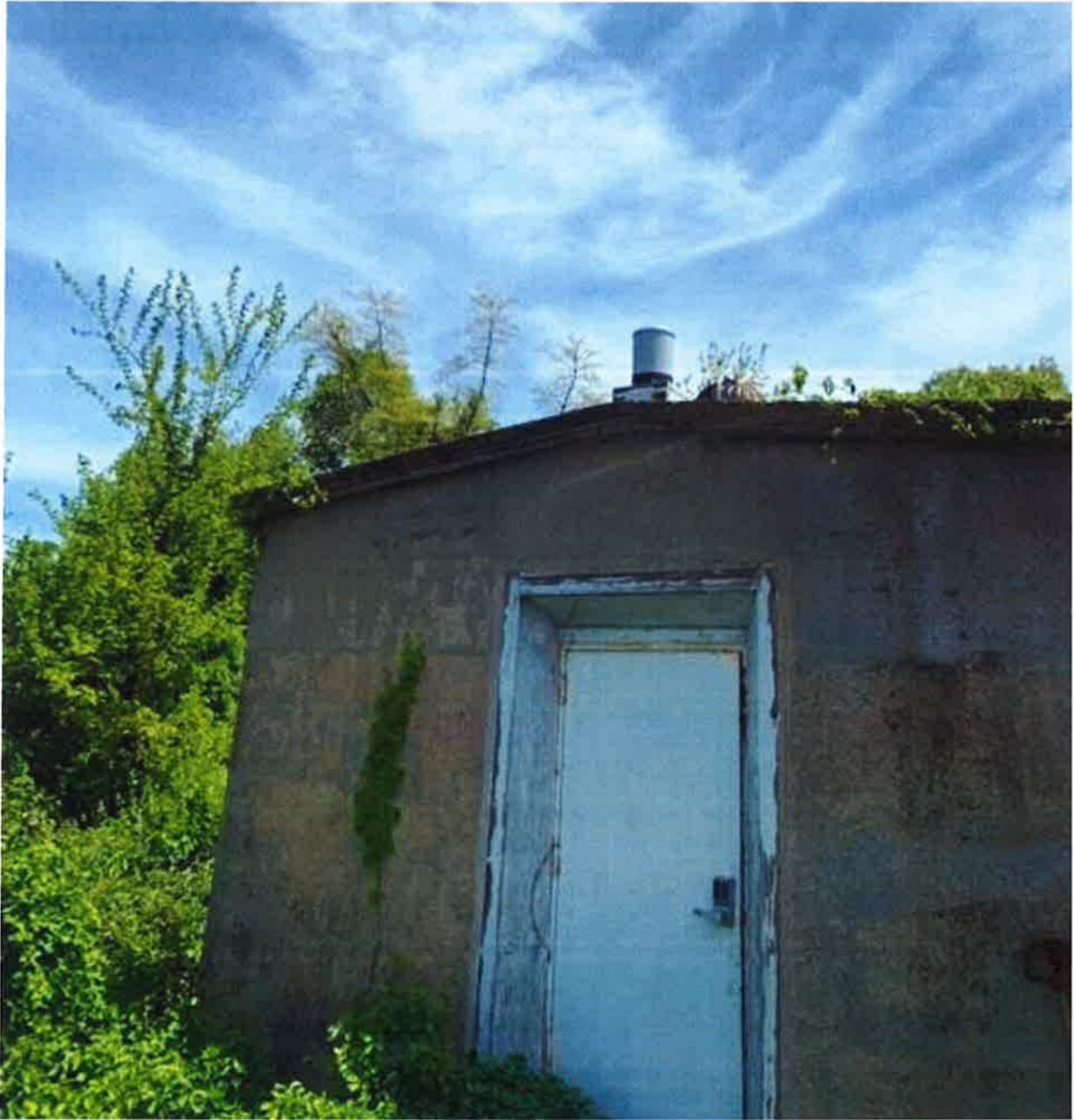
05/19/2022 12:00 - 07/12/2022 12:00  
M-4Pipe: Round (8 in H), Silt0.00 in

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)						Rain (in)
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
05/19/2022	12:15	1.25	22:25	1.57	1.34	14:20	1.20	17:55	2.37	1.80	14:20	0.027	17:55	0.059	0.045	0.022	-
05/20/2022	05:30	1.23	03:20	2.11	1.35	04:35	0.33	09:00	6.28	1.61	04:35	0.008	09:00	0.260	0.041	0.041	0.06
05/21/2022	05:05	1.22	22:50	1.78	1.29	02:45	1.04	18:30	2.53	1.81	02:45	0.023	18:30	0.059	0.043	0.043	0.01
05/22/2022	05:35	1.22	03:20	1.75	1.29	02:15	0.80	18:50	3.65	2.13	02:15	0.022	18:50	0.090	0.050	0.050	-
05/23/2022	11:25	1.21	22:50	1.54	1.28	22:50	1.01	07:50	2.95	2.11	23:05	0.025	07:50	0.069	0.049	0.049	-
05/24/2022	04:05	1.22	12:30	1.74	1.29	04:25	0.74	10:25	3.33	1.94	04:25	0.017	12:30	0.092	0.046	0.046	-
05/25/2022	21:45	1.22	07:15	1.52	1.29	05:20	0.93	11:25	4.08	2.05	05:20	0.021	11:25	0.090	0.048	0.048	-
05/26/2022	02:35	1.21	00:35	2.14	1.29	00:15	0.41	08:00	3.22	1.84	00:15	0.010	16:35	0.076	0.043	0.043	-
05/27/2022	01:40	1.20	07:00	1.55	1.27	00:40	0.84	18:35	3.28	1.96	01:50	0.018	18:35	0.072	0.045	0.045	0.10
05/28/2022	06:15	1.23	00:15	1.59	1.30	04:25	0.76	12:45	3.78	2.21	04:25	0.018	12:45	0.093	0.052	0.052	-
05/29/2022	19:20	1.22	02:20	1.60	1.31	05:30	0.61	11:55	2.96	1.94	05:30	0.014	02:20	0.094	0.047	0.047	-
05/30/2022	00:05	1.21	01:30	1.90	1.28	00:40	0.62	22:25	3.23	2.01	00:50	0.014	22:20	0.098	0.046	0.046	-
05/31/2022	12:30	1.22	15:05	1.36	1.26	04:50	0.36	16:05	3.43	2.04	04:50	0.008	16:05	0.079	0.046	0.046	0.02
06/01/2022	01:40	1.21	11:15	1.57	1.27	02:00	0.30	12:00	3.86	1.84	02:00	0.007	12:00	0.088	0.042	0.042	0.94
06/02/2022	02:50	1.21	03:15	1.54	1.27	04:05	0.61	10:55	3.01	1.96	04:05	0.016	09:25	0.070	0.045	0.045	0.38
06/03/2022	03:00	1.21	02:05	2.51	1.30	01:35	0.48	18:30	3.11	1.91	03:00	0.014	18:30	0.102	0.045	0.045	0.09
06/04/2022	05:15	1.19	17:10	1.85	1.30	03:50	0.49	16:30	4.34	1.54	03:45	0.012	16:30	0.105	0.037	0.037	-
06/05/2022	22:55	1.21	12:25	1.65	1.32	15:50	0.54	19:00	2.67	1.52	15:50	0.012	16:40	0.073	0.037	0.037	-
06/06/2022	22:35	1.22	11:30	1.52	1.29	06:35	0.45	18:05	2.87	1.67	06:35	0.010	18:05	0.068	0.040	0.040	-
06/07/2022	02:25	1.22	20:00	1.59	1.32	04:35	0.39	15:30	3.44	1.73	04:35	0.010	15:30	0.082	0.042	0.042	-
06/08/2022	03:45	1.06	09:40	1.59	1.31	03:55	0.31	00:30	2.92	1.73	03:55	0.007	00:30	0.069	0.042	0.042	0.19
06/09/2022	00:35	1.23	16:30	1.67	1.36	16:20	0.35	06:35	2.86	1.80	16:20	0.008	06:35	0.068	0.046	0.046	1.00
06/10/2022	03:55	1.21	20:10	1.45	1.29	05:30	0.34	07:40	3.97	1.79	05:30	0.009	07:40	0.091	0.042	0.042	-
06/11/2022	06:00	1.05	12:00	1.62	1.36	05:15	0.35	07:15	2.81	1.84	05:20	0.008	19:45	0.069	0.047	0.047	-
06/12/2022	03:55	1.22	06:10	1.55	1.30	05:25	0.46	18:15	2.96	1.73	05:25	0.010	18:10	0.068	0.042	0.042	0.11
06/13/2022	03:10	1.21	20:10	1.60	1.33	02:55	0.53	18:50	3.61	1.64	02:55	0.012	18:50	0.094	0.041	0.041	0.55
06/14/2022	18:55	1.22	00:10	2.11	1.44	04:30	0.30	18:25	3.13	1.60	04:05	0.012	18:25	0.077	0.040	0.040	-
06/15/2022	02:15	1.21	17:20	1.77	1.30	16:35	0.69	16:55	4.57	1.87	16:35	0.015	16:55	0.103	0.045	0.045	-
06/16/2022	19:30	1.21	00:10	2.22	1.32	05:30	0.47	08:05	3.06	1.83	05:30	0.011	19:45	0.074	0.044	0.044	-
06/17/2022	23:20	1.21	11:55	1.48	1.29	17:50	0.71	07:15	3.38	1.80	17:50	0.016	07:15	0.078	0.043	0.043	-
06/18/2022	01:15	1.21	02:40	1.82	1.30	01:55	0.30	07:55	3.84	1.91	03:15	0.010	07:55	0.106	0.045	0.045	-
06/19/2022	15:45	1.11	16:00	2.08	1.31	06:40	0.37	23:40	3.75	2.04	06:40	0.009	16:00	0.109	0.049	0.049	-
06/20/2022	02:35	1.21	15:30	1.49	1.30	04:00	0.54	10:00	3.61	2.02	04:00	0.012	17:10	0.086	0.048	0.048	-
06/21/2022	03:25	1.22	13:30	1.53	1.31	22:50	0.94	12:05	3.93	2.00	22:50	0.021	12:05	0.097	0.048	0.048	-
06/22/2022	02:55	1.21	04:55	1.72	1.30	04:35	0.94	07:55	3.64	2.19	22:00	0.022	07:55	0.083	0.052	0.052	0.02
06/23/2022	23:05	1.22	23:55	1.76	1.30	21:55	0.33	15:10	3.78	1.88	21:55	0.008	15:10	0.087	0.045	0.045	0.15
06/24/2022	01:35	1.22	00:00	1.77	1.35	05:40	0.35	08:55	2.78	1.65	01:50	0.009	08:55	0.068	0.042	0.042	0.01
06/25/2022	03:55	1.09	05:30	2.56	1.47	17:05	0.46	11:15	3.21	1.60	03:55	0.012	11:15	0.083	0.045	0.045	-
06/26/2022	03:00	1.21	15:50	1.98	1.39	15:25	0.33	06:25	2.87	1.48	02:40	0.010	16:25	0.071	0.039	0.039	-
06/27/2022	02:50	1.23	08:05	1.89	1.35	02:00	0.45	09:10	2.76	1.49	02:00	0.011	09:00	0.064	0.038	0.038	0.15
06/28/2022	05:05	1.25	15:25	1.66	1.42	01:45	0.71	10:55	3.52	1.80	01:45	0.021	10:55	0.096	0.049	0.049	-
06/29/2022	21:05	1.24	05:00	1.77	1.33	22:20	0.59	07:55	3.26	1.27	22:20	0.015	07:55	0.080	0.032	0.032	-
06/30/2022	03:05	1.21	08:40	1.46	1.32	02:50	0.51	06:15	2.76	1.26	02:50	0.011	06:15	0.064	0.031	0.031	-
07/01/2022	06:45	1.23	05:55	1.85	1.31	15:35	0.35	09:00	2.68	1.39	15:35	0.009	10:20	0.072	0.034	0.034	-
07/02/2022	00:40	1.22	01:20	2.06	1.37	01:35	0.31	09:45	3.32	1.58	01:35	0.010	09:45	0.078	0.039	0.039	-
07/03/2022	23:25	1.22	10:40	1.47	1.30	17:00	0.94	14:30	3.48	1.66	17:00	0.022	14:30	0.081	0.040	0.040	-
07/04/2022	01:00	1.22	17:45	1.96	1.30	17:30	0.37	10:05	2.82	1.42	05:30	0.009	11:15	0.084	0.034	0.034	-
07/05/2022	03:00	1.22	23:00	1.74	1.30	01:50	0.46	08:10	2.91	1.45	01:50	0.010	08:10	0.069	0.034	0.034	0.01
07/06/2022	05:55	1.22	05:10	1.93	1.37	03:10	0.32	16:35	2.73	1.39	14:25	0.009	15:10	0.071	0.035	0.035	-
07/07/2022	03:20	1.21	08:40	1.86	1.33	04:15	0.43	09:25	3.25	1.57	03:55	0.011	08:40	0.080	0.039	0.039	-
07/08/2022	03:45	1.22	20:00	2.19	1.35	19:40	0.30	17:50	3.22	1.54	19:40	0.012	14:00	0.085	0.039	0.039	-
07/09/2022	04:35	1.22	02:30	1.82	1.32	02:40	0.43	21:00	3.22	1.63	02:40	0.010	06:50	0.084	0.040	0.040	-
07/10/2022	06:35	1.23	00:10	1.89	1.37	02:30	0.31	14:45	3.31	1.41	02:05	0.009	10:05	0.085	0.036	0.036	-
07/11/2022	00:55	1.22	04:35	2.18	1.40	03:55	0.32	15:30	4.33	1.61	03:55	0.009	15:30	0.122	0.043	0.043	-
07/12/2022	00:35	1.22	01:45	1.54	1.27	00:50	0.45	00:55	2.04	1.17	00:50	0.011	00:55	0.048	0.027	0.006	0.04

05/19/2022 12:00 - 07/12/2022 12:00

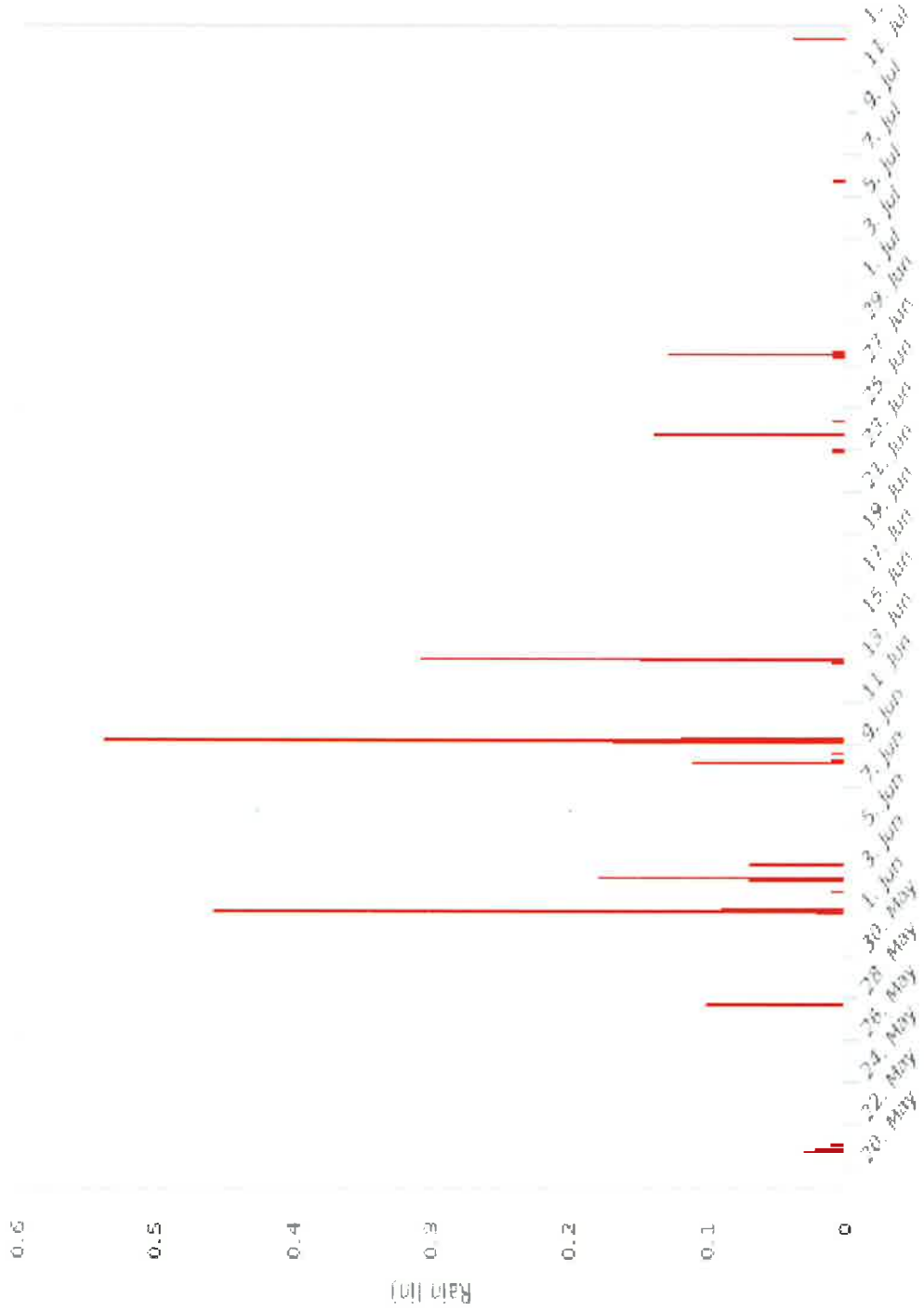
	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)	Rain (in)
Total			2.282	3.83
Average	1.32	1.75	0.042	

YtwnRG

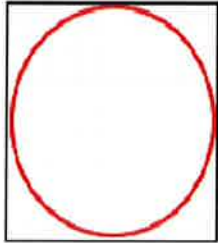


# Hydrograph Report

YtwnRG



Rain Gauge  
**YtwnRG**



Report Period  
03/19/2022 to  
07/12/2022

Legend  
Rain  
Quantity  
Depth  
Velocity





## Daily Tabular Report

05/19/2022 12:00 - 07/12/2022 12:00

YtwnRGRainGauge: Unknown (0 H x 0 W), Silt0.00

Date	Depth (in)					Velocity (ft/s)					Quantity (MGD - Total MG)					Rain (in)	
	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Time	Min	Time	Max	Avg	Total	Total
05/19/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/20/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06
05/21/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01
05/22/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/23/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/24/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/25/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/26/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/27/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.10
05/28/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/29/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/30/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
05/31/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
06/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.94
06/02/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.38
06/03/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09
06/04/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/05/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/06/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/07/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.19
06/09/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.00
06/10/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/11/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/12/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.11
06/13/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.55
06/14/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/15/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/16/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/17/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/18/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/19/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/20/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/21/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/22/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02
06/23/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15
06/24/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01
06/25/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/26/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/27/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.15
06/28/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/29/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
06/30/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/01/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/02/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/03/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/04/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/05/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01
07/06/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/07/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/08/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/09/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/10/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/11/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
07/12/2022	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.04

05/19/2022 12:00 - 07/12/2022 12:00

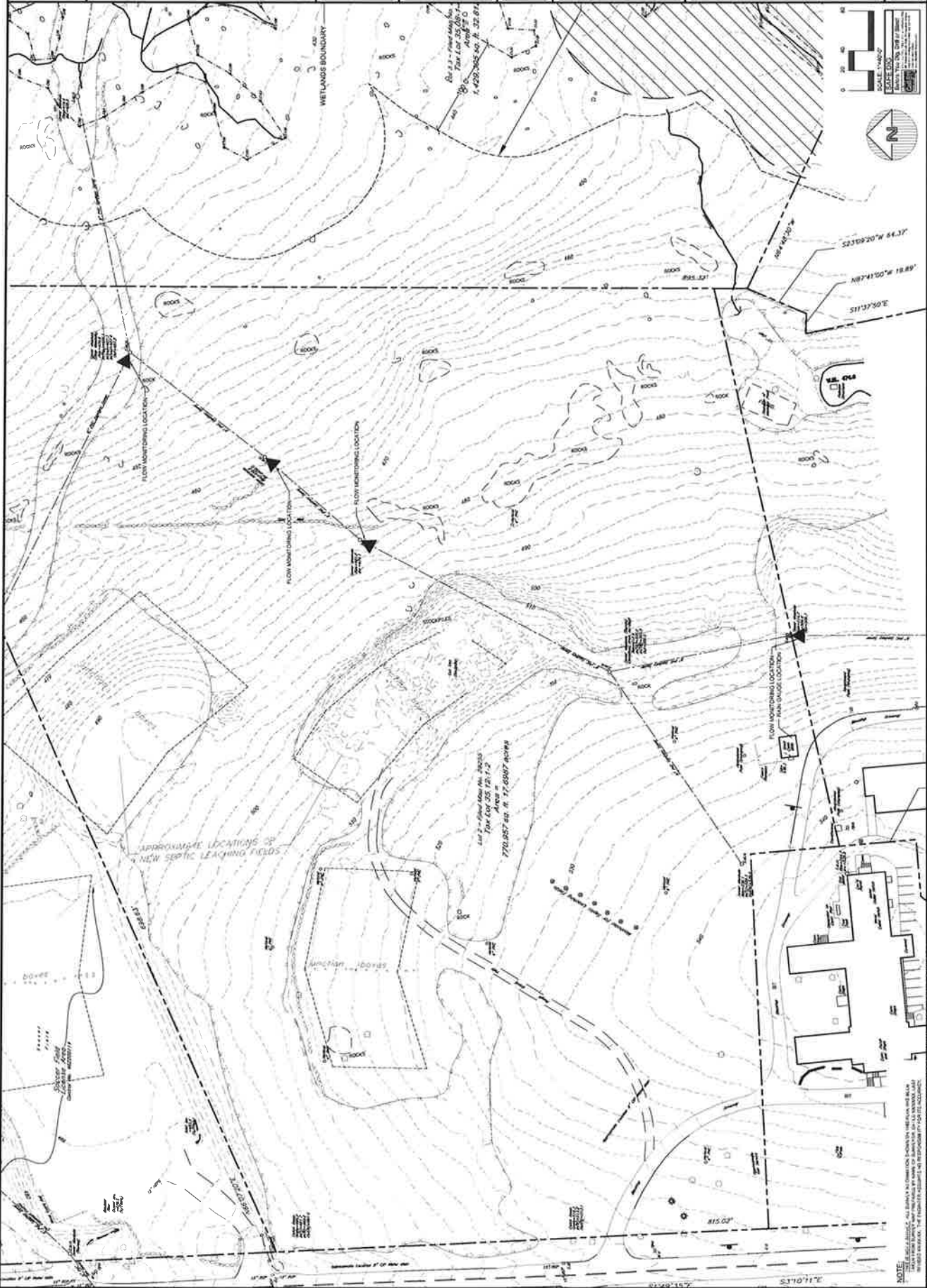
	Depth (in)	Velocity (ft/s)	Quantity (MGD - Total MG)	Rain (in)
Total				3.83
Average				

DATE	2022
BY	TR
PROJECT	18-01
SCALE	AS SHOWN

Project: Toll Brothers  
 1-429-365-500, R. 32.87A  
 251-P Underhill Avenue, Yorktown Heights, NY 10598  
 www.site-design.com  
 Site Design Consultants  
 Civil Engineers • Land Planners



Site Design Consultants  
 Civil Engineers • Land Planners  
 251-P Underhill Avenue, Yorktown Heights, NY 10598  
 (914) 962-4488 • Fax: (914) 962-7316  
 www.site-design.com



NOTE:  
 THIS PLAN IS A PRELIMINARY DESIGN AND IS SUBJECT TO CHANGE WITHOUT NOTICE.  
 THE CLIENT IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.  
 THE DESIGNER ASSUMES NO LIABILITY FOR CONSTRUCTION DEFECTS OR FOR THE ACCURACY OF THE INFORMATION PROVIDED BY THE CLIENT.



**Yorktown Town Hall**  
363 Underhill Avenue, P.O. Box 703  
Yorktown Heights, NY 10598

(914) 962-5722  
www.yorktownny.org

Mr. Kevney D. Moses  
Land Entitlement Manager  
Toll Brothers  
42 Old Ridgebury Road  
Danbury, CT 06810

April 20, 2022

RE: Field Home Residential Project  
Hunterbrook Sewer District  
Sewer Capacity

Dear Mr. Moses:

Wastewater from the proposed townhouse project will be conveyed to the Town's Hunterbrook Pump Station (HBPS) through existing gravity sewers. The HBPS will pump wastewater from the proposed project to Westchester County Peekskill Sewage Treatment Plant.

Since the zoning, number of units, and projected sewage flows are unknown at this time, the capacity of the sewage disposal facilities will need to be reviewed when the requirements of the project are better defined. The sewer collection system that will connect the proposed project to the HBPS has adequate capacity based on the preliminary unit count. It is also anticipated the Peekskill treatment Plant will have adequate capacity to treat the wastewater generated by the proposed project.

The HBPS is having capacity issues during storm events due to inflow and infiltration (I&I). The ability to accept wastewater generated by the proposed project will be based on the projected sewage flows and the effectiveness of I&I remediation.

The Town is willing to serve the project provided that extraneous flows to the HBPS can be reduced sufficiently to keep the station within design capacity. Should you have any questions or require additional information, please call.

Sincerely

Daniel A. Ciarcia, P.E.  
Town Engineer  
DAC: mc  
Matt Slater  
John Tegeder, R.A.

**ATTACHMENT M**

**REAL ESTATE PROPERTY TAX PROJECT REPORT,  
PREPARED BY CRONIN & CRONIN, PLLC**





**REAL ESTATE PROPERTY TAX  
PROJECTION REPORT**

FIELD HOME  
2300 Catherine Street  
Cortlandt Manor

Prepared: May 2022  
Tax Years: 2021/22

Prepared For:  
Toll Brothers  
50- A River Street  
Sleepy Hollow, NY 10591

Prepared By:  
Cronin & Cronin Law Firm, PLLC  
200 Old Country Road, Suite 470  
Mineola, New York 11501



# CRONIN & CRONIN

LAW FIRM, PLLC

BRAD W. CRONIN

SEAN M. CRONIN \*

CARA P. CRONIN †

RAYMOND J. FUREY ◇

\* Member NY and CT Bars

† Member NY and NJ Bars

◇ Member NY and FL Bars

200 OLD COUNTRY ROAD · SUITE 470

MINEOLA, NY 11501-4263

TEL: 516-747-2220

FAX: 516-747-2240

WWW.CRONINTAXLAW.COM

INFO@CRONINTAXLAW.COM

May 17<sup>th</sup>, 2022

50-A River Street  
Sleepy Hollow, NY 10591

Re: OUR FILE # 100-1534

Project: Field Home

2302 Catherine Street, Cortlandt Manor, NY 10567

TOWN OF YORKTOWN

PARCEL ID: 35.12-1-2 and 35.08-1-45

Dear Kevney,

As per your request, the following is a projection of the real estate taxes and a comparison to the actual taxes for the above-noted property.

The Town of Yorktown is required under the Real Property Tax Law to assess all properties based upon their physical condition on May 1 of each tax year with a valuation date of July 1 of the previous year. Accordingly, for purposes of this projection, we are estimating the value of the subject property as if it were fully constructed as of taxable status date.

All estimates are based on current New York State law and the facts as provided to our office. The real estate tax projection does not take into account any exemptions that the property may receive. If the physical plans change, the applicable law may also change and the estimate of real estate taxes will no longer be valid.

The courts have consistently ruled that the income approach is the preferred method for valuing commercial property in New York State. This is consistent with the mandates of Real Property Tax Law Section 581 which mandates this analysis for condominiums in this jurisdiction. Accordingly, we have performed an analysis based on upon hypothetical projected rentals as well as surrounding market data and have estimated the market value of the property.

We have enclosed charts illustrating the current taxes as well as the projected revenue relying upon our projected taxes that will be generated to the various taxing entities.

Should you require anything further, please do not hesitate to contact me.

Very truly yours,

*Sean M. Cronin*

SEAN M. CRONIN

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**SECTION 1**  
**Property & Assessment Information**

**Purpose, Use, and Scope of Report**

The purpose of this report is to provide the client with basic property tax information as well as projection of taxes for the properties described below.

**Property Description**

Property Address: 2302 Catherine Street

Assessing Jurisdiction: Town of Yorktown

General Description: 118 Age-Restricted, 3-bedroom Master-Down Townhome Condominium Units. Each will be between 2,316-2,465 square feet.

Parcel Numbers: 35.12-1-2 and 35.08-1-45

Year Projected to be Built: 2023

Number of Units: 118

Land Area: approximately 50.51 acres

**Critical Study Dates:**

Study Prepared: May 2022

Tax Year under Analysis: 2023/24 (utilizing current tax rates)



**Tax Cycle, Fiscal Periods & Payment Dates**

Tax Year: Town: Yorktown

Fiscal Period: January 1<sup>st</sup>, 2023 through December 31<sup>st</sup>, 2023

Assessment Valuation Date: July 1<sup>st</sup>

Assessment Equalization Rate: 1.93 (2022)

Appeal Deadline: Application: June 21<sup>st</sup>, 2022 (4th Tuesday in June)  
Petition: 30 days after the assessment roll is finalized  
(Usually in September)

Tax Bill/Notices: Town: April 1<sup>st</sup>  
School: September 1<sup>st</sup>

Number of Tax Bill Installments: Town: One  
School: Two

Tax Bills Due: Town: Payable by April 30<sup>th</sup> without penalty  
School: 1<sup>st</sup> Half, Payable by September 30<sup>th</sup> without penalty  
2<sup>nd</sup> Half, Payable by January 31<sup>st</sup> without penalty

**Reassessment Program**

The Town of Yorktown does not engage in annual revaluations, and has not performed a town-wide revaluation of all the parcels in over fifty years. A subject sale at a price above the current assessment would not result in an increased assessment since both the New York Supreme Court and the U.S. Supreme Court have ruled that reassessing a property based upon a sale under these circumstances is selective reassessment in violation of the “Equal Protection Clause” of their respective Constitutions. The jurisdiction is able to increase your assessment based upon new construction, a physical change to the property, a change in zoning, or other similar change in use or condition.

### Condominium Assessments

New York Real Property Tax Law (“RPTL”) §581 and New York Real Property Law (“RPL”) §339-y establishes rules regarding the governing of assessment of residential cooperative, condominiums and rental properties. The provisions of RPTL §581 provide a method for valuing property which significantly reduces the assessed value of condominiums and cooperatives. In 1985, the Real Property Tax Law was amended to read:

“The provisions of paragraph (a) of this subdivision shall not apply to such real property classified within:

- (i) on and after January first, nineteen hundred eighty-six, class one of section one thousand eight hundred two of this chapter; or
- (ii) on and after January first, nineteen hundred eighty-four, the homestead class of an approved assessing unit which has adopted the provisions of section one thousand nine hundred three of this chapter, or the homestead class of the portion outside an approved assessing unit of an eligible split school district which has adopted the provisions of section nineteen hundred three-a of this chapter...”

While the primary reliance is on the income approach to value, many of the variables related to the project have been reviewed. We have estimated the assessment for the property taking into consideration not only the income approach, but also the construction costs, selling prices and assessments of similar units as well as our experience with the Town and the Assessor.

**SECTION 2**  
**Assumptions & Disclaimer**

**Assumptions**

The underlying assumptions relied upon to project the future real estate taxes for the above-noted property include, but are not limited to:

1. That the legal descriptions, parcel numbers, and financial information supplied by the client are accurate;
2. That the building square footage, including the breakdown of office and storage space, provided to our office by the client is accurate;
3. A market study of comparable rentals in the vicinity performed by our office;
4. It should be noted that the anticipated tax rate for each tax year will increase by approximately 2% to 5% for Town, County, School and Special District taxes. This takes into consideration the 2% tax cap. The tax cap can be overridden by local governments, exempts pension costs and applies only to municipal budgets, not to the tax rate;
5. That the property has 118 Age Restricted, 3-Bedroom Townhome Units;

**Disclaimer**

The foregoing represents our best opinion based upon the facts and figures given to us. Our opinion is not meant to be a legal representation and/or warranty. It represents our best estimate of what an assessment should be and not what an Assessor may arbitrarily choose to place on the subject property, which, of course, is subject to a tax certiorari proceeding.

**Additional Assumptions for New Building:**

The underlying assumptions relied upon to project the future real estate taxes for the above-noted property include, but are not limited to:

1. That each Condo Unit will be on its own tax lot;
2. That the existing Nursing Home Facility will be demolished. A new community will be built consisting of 118 Townhome Units;
3. A market study of comparable rentals in the vicinity performed by our office;
4. The projection is estimating the project “as if” complete;
5. That the laws governing the assessing of Real Property as they currently exist in New York State will be in effect when the construction is completed.

**Additional Assumptions for Condo:**

The underlying assumptions relied upon to project the future real estate taxes for the above-noted property include, but are not limited to:

1. That the condominium will be Age Restricted and consist of 118 units;
2. That all 118 units will include 3-Bedrooms, with the Master Bedroom on the First Floor;
3. That the lot will ultimately be re-apportioned into 118 lots that will share a common area. The Town of Yorktown will assign a separate tax lot designation to the common area but there will be no taxes due for this tax lot due the condominium structure;
4. That the average sale price of each unit will be \$862,995;
9. That the 2022/23 assessment ratio used in our analyses is subject to change annually, potentially resulting in a change of the full market value for these properties next year;
10. That this letter is being sent to you with the express understanding that our firm assumes no liability for the projections presented herein;



**SECTION 3**  
**Assessment Analysis & Tax Rate Increase**

**Assessment Analysis**

In general, the courts in New York have held that for income producing property, the Income Capitalization Approach is the most trusted method of valuation. We therefore look to market, as well as the actual income and expenses, at a location and value the property by applying those figures in an Income Capitalization analysis. The Income Capitalization analysis is the foundation of the majority of our negotiations with the respective taxing jurisdictions for tax certiorari purposes.

While the Income Capitalization Approach is the trusted method of valuation, the courts have held that if there is a recent, arm's length, subject sale of the property that cannot be explained away as abnormal, the sale price is the best indication of value. The courts have put the most weight on the sale price as an indication of the market and held that the subject sale supersedes the Income Capitalization Approach in these circumstances. New York Courts have also found that there is often a business component that can inflate a sale price making the sale not reflective of the market for assessment purposes to some degree. So while a subject sale can be critical in our negotiations, there are many factors we will review to determine if the sale is reflective of the market or rather a more complicated business that should not dictate the real estate value.

Since the Town of Yorktown does not engage in annual revaluations and has no plans in the foreseeable future to perform a revaluation, absent a physical change to the property or in zoning, the assessment should remain stable and unchanged after it is established. The increase in your taxes over time would, therefore, be a result of a tax rate increase as indicated on the projections in this report.

Our assessment analysis is based upon the review of comparable properties in the area, the current market rent, the history of the practices and assessments for the subject property, as well as the rent provided to us in your Potential Acquisition report. According to our analysis, the current assessment for the properties appears to be "in line" with the market values. Unless there is significant physical change to the condition of the properties, the existing assessments will be carried forward for the subsequent years.

\*\* Please see Exhibits 1 in Section 5 of the report for our Income Approach Analysis.

**Tax Rate Increase**

We analyzed the historical tax rate increase in the Town of Yorktown over the past five years. The anticipated tax rate for the 2022/23 and subsequent tax years could increase by approximately 2% to 5% for Town, County, School and Special District taxes.

*Tax Cap:* There is a 2% tax cap in New York State. The tax cap can be overridden by local governments, exempts pension costs, and applies only to municipal budgets- not to the tax rate.

**Comparable Properties**

The following three properties are located in the same area as the subject properties and were used in our Assessment Analysis:

Comp 1:      Property Address: Glassbury Court: 2265 Dalton Drive  
                 Tax Map # 35.12-1-1.27-54  
                 Property Type: Condo  
                 Assessment: 7,100  
                 Full Market Value: \$334,905  
                 SF: 2,265  
                 Value per SF: \$148  
                 Taxes 21/22: \$8,074  
                 Taxes per SF: \$3.56

Comp 2:      Property Address: Glassbury Court: 1806 Summerhill Ct  
                 Tax Map # 35.12-1-1.19-37  
                 Property Type: Condo  
                 Assessment: 6,800  
                 Full Market Value: \$320,754  
                 SF: 2,265  
                 Value per SF: \$142  
                 Taxes 21/22: \$7,733  
                 Taxes per SF: \$3.41

**SECTION 4**  
**Property Description & Tax Projection**

**PROPERTY ADDRESS**

**PROPERTY DESCRIPTION**

C&C File # 100-1534

Property Address: 2300 Catherine Street, Cortlandt Manor

Assessing Jurisdiction: Town of Yorktown

Tax Map #: 35.12-1-2 and 35.08-1-45

Property Type: Condominiums

Year Built: 2023

Occupancy: 118 Units

Building Square Footage

Land Acreage: 50.51

Current Assessment 21/22: 74;250

Equalization Rate 22/23: 1.93

Current Full Market Value 21/22: 3,502,357

Current Taxes 21/22: \$721.80 \*This property receives tax exemptions as a Nursing Home

Current Tax Rate 21/22: 1,440.422

**TAX PROJECTION**

<b>Projected Tax Burden as Fully Constructed:</b>	<b>Year</b>	<b>Total Projected Assessed Value</b>	<b>Combined Tax Rate</b>	<b>Est Taxes</b>	<b>Est Taxes Per Unit</b>
		2023	895,939	1,440.422	\$1,290,529.83

<b>Portion</b>	<b>Total Projected Assessed Value</b>	<b>Current Tax Rate</b>	<b>Est Taxes</b>	<b>Est Per Unit</b>
<b>Town/County</b>	895,939	439.267740	\$393,557.10	\$3,335.23
<b>School</b>	895,939	1,001.154	\$896,972.73	\$7.601.46
<b>Total</b>	895,939	1,440.422	\$1,290,529.83	\$10,936.69

**SECTION 5**  
**INCOME APPROACH ANALYSIS**

**EXHIBIT 1**

---

<b>FILE #</b>	100-1534	<b>LAND ACRES</b>	50.51
<b>TAX MAP #</b>	35.12-1-2	<b>LAND SQ.FT.</b>	2,200,215.6
	35.08-1-45		
<b>ADDRESS</b>	2302 CATHERINE ST		

**VALUATION DATE** 2021/22  
**July 1<sup>st</sup>**

**TENANT/TYPE**

Condos	Units	118
	Rental Rate	\$4,500
	Gross	\$6,372,000

**TOTAL UNTIS** 118

**POTENTIAL GROSS INCOME** \$6,372,000  
**VACANCY** 5%

**EFFECTIVE GROSS** 6,053,400

**EXPENSES** 25%

**NET OPERATING INCOME** 4,540,050

**CURRENT TAXES** 184,806

**TOTAL CAP RATE**  
**INCLUDING TAX** 9.78  
**FACTOR**

**FULL VALUE** 46,421,718

**EQUALIZATION RATE** 0.0193

**NEW AV** 895,939

**VALUE PER**  
**UNIT** 393,404



**ATTACHMENT N**

**SUPPLEMENTAL ENVIRONMENTAL REVIEW LETTER,  
PREPARED BY SESI CONSULTING ENGINEERS,  
DATED DECEMBER 18,2023**

*Principals*

Anthony Castillo, PE  
Fuad Dahan, PhD, PE, LSRP  
Franz W. Laki, PE  
John M. Nederfield, PE  
Justin M. Protasiewicz, PE  
Michael St. Pierre, PE

December 18, 2023      *via email:* [kmoses@tollbrothers.com](mailto:kmoses@tollbrothers.com)

Kevney Moses  
Toll Brothers  
42 Old Ridgebury Road  
Danbury, Connecticut 06810

**RE:    Supplemental Environmental Review Letter – Response to Comments  
Proposed Residential Development  
2302 Catherine Street  
Yorktown, New York  
SESI Project No. 12092**

Dear Mr. Moses,

SESI Consulting Engineers (SESI), previously prepared a Supplemental Environmental Review Letter, dated October 2023, to further summarize our due diligence activities completed for the property located at the above address, which is referred to herein as “the Site.” At your request, the following letter has been prepared in response to comments recently received from the Town of Yorktown in response to our October 2023 letter.

It is our understanding that the proposed construction will consist of a total of 118 townhome units, two (2) stormwater management basins, several retaining walls, and associated roadways and parking areas. SESI’s previously completed a Phase I ESA dated February 2022, which was revised in April 2022, and which identified three (3) recognized environmental concerns (RECs) which were as follows: REC 1 – Historically Applied Pesticides, REC 2 – Unknown Fill Material, and REC 3 – Former Septic System. As a result of our findings, SESI performed environmental soil sampling and testing as part of a limited Phase II Environmental Site Assessment (ESA) on March 10<sup>th</sup>, 2022 at the Site. Based on the findings of the Phase II ESA, it was determined that no additional considerations were required at the Site. In addition to the environmental due diligence activities, SESI also completed a Geotechnical Investigation and Report for the Site in March 2022.

As noted in the introduction, SESI previously completed a Supplemental Environmental Review Letter, dated October 2023, to further summarize our due diligence activities completed for the Site. Per conversations with your office, it is our understanding that the Town of Yorktown has provided further comments on the Phase II ESA as noted below. This letter has been prepared in response to the comments provided.

The following comments were provided by the Town of Yorktown pertaining to SESI's Phase II ESA:

1. REC 3 advised a GPR survey to identify the septic. Has this been conducted? If not, please explain why.
2. REC 2 states "proper characterization of materials should be completed prior to removal." We did not find such elaborations.
3. No chain of custody info from TP-1 or TP-3 have been provided.
4. The testing for TP-2 and TP-4 have a "hold," please explain.
5. Applicant should state intended methods of removal and/or reuse of this material.
6. Town Consultant and Town Engineer should evaluate. Referral to DEC is also recommended.

In response to the comments from the Town of Yorktown above, we have prepared the following remarks:

Response to Comment #1: On August 31, 2022, a GPR survey was conducted at the Site to investigate the presence of subsurface anomalies consistent with underground storage tanks (USTs), underground utilities, and septic tanks. No subsurface anomalies consistent with a septic tank was observed by the GPR, however, a sanitary line was observed to exit the northeast corner of the building and proceed northward. One boring was installed along the sanitary line to a depth of 11-feet. No staining, odors, or hits above background on the PID were observed in the boring. One sample was collected at the depth of the sanitary line and sent for TCL+30/TAL analysis. No exceedances were detected in excess of the Unrestricted Use, Residential, or Restricted Residential SCOs.

Response to Comment #2: REC 2 describes the unknown fill material that was later confirmed to consist entirely of landscaping debris and mulch. Based on our investigations, no visual or olfactory impacts were observed within the material, and no further action was deemed warranted for this REC based on field observations. As such, it has been determined that the material identified within REC 2 can be processed and reused onsite during redevelopment activities or disposed of offsite. If it is determined that the material will be designated for offsite disposal, proper sampling and testing should be conducted in order to satisfy the requirements of the receiving facility, if any.

Response to Comment #3: A total of four (4) test pits were installed within the material comprising REC 2, designated TP-1 through TP-4. No visual or olfactory impacts to the material were observed during the investigation. Upon review of the field observations, it was determined that only two (2) samples were required to adequately investigate the material. As a result, no samples from TP-1 or TP-3 were submitted to the laboratory for analysis.

Response to Comment #4: A table depicting the analytical results from TP-2 and TP-4 and the full laboratory report are included as **Attachment A**. The samples were initially put on hold pending the results of the field observations of the material. As noted in Response to Comment

#3 above, it was determined that two (2) samples were sufficient to adequately investigate the material.

Response to Comment #5: It has been determined that the material identified within REC 2 can be processed and reused onsite during redevelopment activities in non-structural fill areas, such as landscaped areas without constraint, or disposed of offsite. SESI has not yet been made aware of the intended use of the material within REC 2. Based on the nature of the material comprising REC 2, it is likely that the landscape debris and mulch were generated onsite from landscaping activities maintaining the grounds. As a result, we are not aware of regulations that preclude the reuse of such material elsewhere onsite.

Response to Comment #6: As noted in our October 2023, Supplemental Environmental Review Letter, we have concluded that no justification exists to further investigate the Site or seek the involvement of the NYSDEC or any other regulatory agency. SESI has followed the applicable guidance and regulations for all appropriate inquiries and investigations, and we do not have any further concerns with REC 2 based on our review and investigations. The size of the landscaping debris pile that constitutes REC 2 is well below NYSDEC regulatory standards for a mulch processing facility (Part 261-4.2). Nor were any other indicators found that would trigger NYSDEC regulatory programs. As such, we question the purpose of referring the matter to the NYSDEC.

Sincerely,

**SESI CONSULTING ENGINEERS**



Justin M. Protasiewicz, PE  
Principal

\\sesi-archive\Q DRIVE\PROJECTS\_Archives\12092 - Westchester, NY\Letters\RESPONSE TO COMMENTS\12092\_TOLL YORKTOWN  
SUPPLEMENTAL ENVIRONMENTAL REVIEW LETTER\_2023.12.18.docx



# ATTACHMENT A





Table 1  
2300 Catherine Street  
Yorktown, New York  
SESI Project 12092

Lab ID:	NY Soil Clean-up Objectives					2030609-09				2030609-10				2030609-11				2030609-12						
	NYSDEC	NYSDEC	NYSDEC	NYSDEC	NYSDEC	2030609-09				2030609-10				2030609-11				2030609-12						
Client ID:	Soil Clean-up	Soil Clean-up	Soil Clean-up	Soil Clean-up	Soil Clean-up	HAP-9				HAP-10				REC-3-TP-2				REC-3-TP-4						
Date Sampled:	Unrestricted	Residential	Restricted	Commercial	Industrial	03/10/2022 12:05				03/10/2022 12:30				03/10/2022 14:00				03/10/2022 14:30						
Matrix:	Use	Residential	Residential	Commercial	Industrial	Soil				Soil				Soil				Soil						
Compound																								
Extractable Petroleum Hydrocarbons Category 2 (mg/kg)														Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL			
Total EPH														586		30.3	60.7	466		42.9	85.8			
General Chemistry (%)						Result	Qualifier	ZERO		Result	Qualifier	ZERO		Result	Qualifier	ZERO		Result	Qualifier	ZERO				
Percent Solids						79.9				71.3				33.0				23.3						
Pesticides (mg/kg)						Result	Qualifier	MDL	RL	Result	Qualifier	MDL	RL											
4,4'-DDD	0.0033	2.6	13	92	180																			
4,4'-DDD [2C]	0.0033	2.6	13	92	180	0.00190		0.000745	0.00163	0.000834	U	0.000834	0.00182											
4,4'-DDE	0.0033	1.8	8.9	62	120	0.0372		0.00089	0.00163	0.00564		0.000997	0.00182											
4,4'-DDE [2C]	0.0033	1.8	8.9	62	120																			
4,4'-DDT	0.0033	1.7	7.9	47	94					0.00220		0.00129	0.00182											
4,4'-DDT [2C]	0.0033	1.7	7.9	47	94	0.0121		0.00115	0.00163															
Aldrin	0.005	0.019	0.087	0.68	1.4	0.000771	U	0.000771	0.00163	0.000864	U	0.000864	0.00182											
alpha-BHC	0.02	0.097	0.48	3.4	6.8	0.000485	U	0.000485	0.00163	0.000543	U	0.000543	0.00182											
beta-BHC	0.036	0.072	0.36	3	14	0.000778	U	0.000778	0.00163	0.000871	U	0.000871	0.00182											
Chlordane						0.000724	U	0.000724	0.00163	0.000811	U	0.000811	0.00182											
delta-BHC	0.04	100	100	500	1,000	0.000756	U	0.000756	0.00163	0.000847	U	0.000847	0.00182											
Dieldrin	0.005	0.039	0.2	1.4	2.8	0.000851	U	0.000851	0.00163	0.000954	U	0.000954	0.00182											
Endosulfan I	2.4	4.8	24	200	920	0.000769	U	0.000769	0.00163	0.000861	U	0.000861	0.00182											
Endosulfan II	2.4	4.8	24	200	920	0.00074	U	0.00074	0.00163	0.000829	U	0.000829	0.00182											
Endosulfan sulfate	2.4	4.8	24	200	920	0.000612	U	0.000612	0.00163	0.000686	U	0.000686	0.00182											
Endosulfans, Total (alpha and beta)						0.00074	U	0.00074	0.00163	0.000829	U	0.000829	0.00182											
Endrin	0.014	2.2	11	89	410	0.000562	U	0.000562	0.00163	0.00063	U	0.00063	0.00182											
Endrin aldehyde						0.000649	U	0.000649	0.00163	0.000726	U	0.000726	0.00182											
Endrin ketone						0.000573	U	0.000573	0.00163	0.000642	U	0.000642	0.00182											
gamma-BHC (Lindane)	0.1	0.28	1.3	9.2	23	0.000516	U	0.000516	0.00163	0.000578	U	0.000578	0.00182											
Heptachlor	0.042	0.42	2.1	15	29	0.000436	U	0.000436	0.00163	0.000488	U	0.000488	0.00182											
Heptachlor Epoxide						0.000821	U	0.000821	0.00163	0.00092	U	0.00092	0.00182											
Methoxychlor						0.000477	U	0.000477	0.00163	0.000534	U	0.000534	0.00182											
Toxaphene	0.0784					0.0784	U	0.0784	0.0826	0.0878	U	0.0878	0.0926											
Total Metals (mg/kg)						Result	Qualifier	RL		Result	Qualifier	RL		Result	Qualifier	RL	Result	Qualifier	RL	Result	Qualifier	RL		
Aluminum						9930				7.58				3740		10.7								
Antimony						3.41		1.57		5.33		1.75		3.79	U	3.79	5.36	U	5.36					
Arsenic	13	16	16	16	16									3.79	U	3.79	5.36	U	5.36					
Barium	350	350	400	400	10,000									144		1.52	260							
Beryllium	7.2	14	72	590	2,700									0.333		0.0758	0.114					0.107		
Cadmium	2.5	2.5	4.3	9.3	60									0.758	U	0.758	1.07	U	1.07					
Calcium														16800		75.8	25500							
Chromium														12.4		0.758	3.94						1.07	
Cobalt														5.98		0.607	1.96						0.858	
Copper	50	270	270	270	10,000									21.0		0.758	13.7						1.07	
Iron														12700		15.2	4870						21.5	
Lead	63	400	400	1,000	3,900	15.8		1.57		40.7		1.75		22.1		3.79	5.36	U	5.36				5.36	
Magnesium														5220		152	2720							215
Manganese	1600	2,000	2,000	10,000	10,000									382		0.758	386						1.07	
Nickel	30	140	310	310	10,000									12.7		0.379	4.99						0.536	
Potassium														2390		303	1270							429
Selenium	3.9	36	180	1,500	6,800									3.79	U	3.79	5.36	U	5.36				5.36	
Silver	2	36	180	1,500	6,800									0.455	U	0.455	0.644	U	0.644				0.644	
Sodium														428		152	609							215
Thallium														3.79	U	3.79	5.36	U	5.36					5.36
Vanadium														21.0		1.52	7.00							2.15
Zinc	109	2200	10,000	10,000	10,000									88.7		2.27	67.0						3.22	
<b>Main Footnotes:</b>																								
Standards listed are based upon APL's interpretation of the published documents.																								
APL assumes no liability for the interpretation and/or accuracy of the standards.																								
<b>Qualifiers:</b>																								
U - Indicates compound analyzed for but not detected																								
J - Indicates estimated value for TICs and all results when detected below the RL																								
D - Indicates result is based on a dilution																								
E - Concentration exceeds highest calibration standard																								
B - Indicates compound found in associated blank																								
H - Indicates a Hold Time violation																								
P - Indicates a Greater than 25% diff. between 2 GC columns.																								
<b>Key:</b>																								
<b>Specific Footnotes:</b>																								
All regulatory values are from the New York DEC December 14, 2006 Table 375-6.8 Restricted and Unrestricted use Soil Clean-up Objectives.																								





AQUA PRO-TECH LABORATORIES  
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# ANALYTICAL RESULTS

## REDUCED DELIVERABLES FORMAT

APL Work Order Number: 2030609

Sesi Consulting Engineers

Project: 2300 Catherine St.

Brian Wood  
Laboratory Director

All Results meet the requirements of the National Environmental Laboratory Accreditation Conference and/or State specific certifications as applicable.

Report Date: Apr 01, 2022

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# Sample Summary

Work Order: 2030609

Client: Sesi Consulting Engineers

Project: 2300 Catherine St.

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
HAP-1	2030609-01	Soil	03/10/2022 09:00	03/10/2022 17:50
HAP-2	2030609-02	Soil	03/10/2022 09:20	03/10/2022 17:50
HAP-3	2030609-03	Soil	03/10/2022 09:40	03/10/2022 17:50
HAP-4	2030609-04	Soil	03/10/2022 10:15	03/10/2022 17:50
HAP-5	2030609-05	Soil	03/10/2022 10:30	03/10/2022 17:50
HAP-6	2030609-06	Soil	03/10/2022 11:00	03/10/2022 17:50
HAP-7	2030609-07	Soil	03/10/2022 11:20	03/10/2022 17:50
HAP-8	2030609-08	Soil	03/10/2022 11:45	03/10/2022 17:50
HAP-9	2030609-09	Soil	03/10/2022 12:05	03/10/2022 17:50
HAP-10	2030609-10	Soil	03/10/2022 12:30	03/10/2022 17:50







## Extractable Petroleum Hydrocarbons:

### *Gas Chromatography/Flame Ionization Detector*

New Jersey Department of Environmental Protection Site Remediation Program Extractable Petroleum Hydrocarbons Methodology (Version 3.0).

USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8015B or NJDEP Office of Quality Assurance Quantitation of Semi-Volatile Petroleum Products in Water, Soil and Sediment OQA-QAM-025, Revision 6.

## Metals:

### *Inductively-Coupled Plasma Atomic Emission Spectrometry or Inductively-Coupled Plasma Mass Spectrometry*

**Wastewater and Groundwater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 200.7, Method 200.8.

**Soil Samples:** USEPA Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 6010D.

## Mercury:

### *Cold Vapor Atomic Absorption Spectrometry*

**Wastewater and Groundwater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 245.1.

**Soil Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 7471B.

## Volatile Organic Compounds:

### *Purge and Trap Gas Chromatography/Mass Spectrometry*

**Drinking Water Samples:** USEPA Methods for the Determination of Organic Compounds in Drinking Water, Method 524.2.

**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 624.1, Method 8260C.

**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8260C.

## Semi-Volatile Organic Compounds:

### *Gas Chromatography/Mass Spectrometry*

**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 625.1, Method 8270D.

**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8270D.

## PFAS Compounds:

### *Liquid Chromatography/Tandem Mass Spectrometry*

**Drinking Water Samples:** USEPA Methods for the Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS), Method 537.

## Pesticides:

### *Gas Chromatography/Electron Capture Detector*

**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8081B.

**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8081B.

## Polychlorinated Biphenyls (PCBs):

### *Gas Chromatography/Electron Capture Detector*

**Wastewater Samples:** USEPA Methods for the Analysis of Water and Wastes, Method 608.3, Method 8082A.

**Soil and Groundwater Samples:** USEPA SW-846 Test Methods for Evaluating Solid Waste Physical/Chemical Methods Update III, Method 8082A.

## General Chemistry Methods:

*Various general chemistry methods are taken from "Standard Methods for the Examination of Water and Wastewater, 19th Edition".*

Specific method citations can be found on the Analytical Results Summary page of this report listed under 'Method'.

\*\* A complete list of APL's certified Methods are accessible on the [Standards And Docs](#) page of the Results Retrieval System

Aqua Pro-Tech Laboratories  
Data Reporting Abbreviations and Qualifiers

**MDL:**

Method Detection Limit. The minimum reportable concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero. The value is calculated from the analysis of seven replicates of a spike sample. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

**RL:**

Reporting Limit. The Concentration of the lowest calibration standard that was included in the initial calibration of the instrument. On analytical reports this value is corrected for percent moisture and any concentration or dilution factors.

**Concentration (Conc) / Result:**

If the compound is detected, the measured concentration is reported. If this column is left blank, or contains a 'less than' (<) symbol, the compound was not detected.

**Tentatively Identified Compound (TIC):**

A TIC is a non-targeted compound, not included in the calibration, identified by a mass spectral library search.

**Qualifiers:**

- U:** Indicates the compound was analyzed for but was not detected.
- J:** Indicates an estimated value. All tentatively identified compounds (TICs) and results below the RL receive this qualifier.
- B:** Indicates the analyte was found in the method blank as well as the sample.
- N:** Used when reporting a specific tentatively identified compound.
- E:** Indicates that the concentration of the compound exceeds the calibration range of the instrument. The results of a diluted analysis will also be reported. The results of the dilution should be used for those compounds exceeding the calibration range in the undiluted analysis.

**DATA OF KNOWN QUALITY CONFORMANCE/NON-CONFORMANCE  
SUMMARY QUESTIONNAIRE**

**Laboratory Name:** Aqua Pro-Tech Laboratories

**Client:** Sesi Consulting Engineers

**Project Location:** 2300 Catherine St.

**Project Number:** 2030609

**Laboratory Sample ID(s):** 01-10

**Sampling Date(s):** March 10,2022

**List DKQP Methods Used:** SW 846 6010D;SW 846 8081B;Gravimetric

1	For each analytical method referenced in this laboratory report package, were all specified QA/QC performance criteria followed, including the requirement to explain any criteria falling outside of acceptable guidelines, as specified in the NJDEP Data of Known Quality performance standards?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1A	Were the method specified handling, preservation, and holding time requirements met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1B	<b>EPH Method:</b> Was the EPH method conducted without significant modifications (see Section 11.3 of respective DKQ methods)	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A
2	Were all samples received by the laboratory in a condition consistent with that described on the associated chain-of-custody document(s)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
3	Were samples received at an appropriate temperature (4±2° C)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
4	Were all QA/QC performance criteria specified in the NJDEP DKQP standards achieved?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
5	Were reporting limits specified or referenced on the chain-of-custody or communicated to the laboratory prior to sample receipt?  Were these reporting limits met?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
6	For each analytical method referenced in this laboratory report package, were results reported for all constituents identified in the method-specific analyte lists presented in the DKQP documents and/or site-specific QAPP?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
7	Are project-specific matrix spikes and/or laboratory duplicates included in this data set?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Notes: For all questions to which the response was "No" (with the exception of question #7), additional information should be provided in an attached narrative. If the answer to question #1, #1A, or #1B is "No", the data package does not meet the requirements for Data of Known Quality.





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## QUALITY CONTROL Conformance/Non-Conformance Summary

### **ANALYSIS: INORGANICS [6010D]**

COMMENTS:

The matrix spike and matrix spike duplicate recoveries for Arsenic and Lead were outside QC limits (low).

### **ANALYSIS: PESTICIDES [8081B]**

COMMENTS:

The matrix spike and matrix spike duplicate recovery for 4,4'-DDT was outside QC limits (high).

Reviewed By: \_\_\_\_\_

Brian Wood - Laboratory Director

(JM)

4/1/2022

Date

*For any questions about your Quality Control, please call us at 973-227-0422*



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## Positive Results Only Summary

2030609-01 (Soil)

Sample Name: HAP-1

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.17		0.121	1.70	mg/kg dry	1	3/17/22 20:12
Lead	22.8		0.142	1.70	mg/kg dry	1	3/17/22 20:12

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	0.000914	J	0.000807	0.00176	mg/kg dry	1	3/23/22 21:29
4,4'-DDE [2C]	0.0163		0.000965	0.00176	mg/kg dry	1	3/23/22 21:29
4,4'-DDT	0.00253		0.00125	0.00176	mg/kg dry	1	3/23/22 21:29

2030609-02 (Soil)

Sample Name: HAP-2

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.47		0.124	1.73	mg/kg dry	1	3/17/22 20:14
Lead	27.4		0.144	1.73	mg/kg dry	1	3/17/22 20:14

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.00426		0.000985	0.00180	mg/kg dry	1	3/23/22 21:52

2030609-03 (Soil)

Sample Name: HAP-3

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.01		0.109	1.52	mg/kg dry	1	3/17/22 20:17
Lead	14.8		0.127	1.52	mg/kg dry	1	3/17/22 20:17

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.00137	J	0.000725	0.00158	mg/kg dry	1	3/23/22 22:14
4,4'-DDE	0.0169		0.000866	0.00158	mg/kg dry	1	3/23/22 22:14
4,4'-DDT	0.00700		0.00112	0.00158	mg/kg dry	1	3/23/22 22:14

2030609-04 (Soil)

Sample Name: HAP-4

**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.36		0.122	1.71	mg/kg dry	1	3/17/22 20:20
Lead	24.0		0.142	1.71	mg/kg dry	1	3/17/22 20:20

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 H - Indicates a Hold Time violation  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit, RL - Reporting limit

7  
7.



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## Positive Results Only Summary

2030609-04 (Soil)

Sample Name: HAP-4

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.00373		0.000970	0.00177	mg/kg dry	1	3/23/22 22:36

2030609-05 (Soil)

Sample Name: HAP-5

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.80		0.133	1.86	mg/kg dry	1	3/17/22 20:22
Lead	25.8		0.155	1.86	mg/kg dry	1	3/17/22 20:22

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.000953	J	0.000886	0.00194	mg/kg dry	1	3/23/22 22:58
4,4'-DDE [2C]	0.0425		0.00106	0.00194	mg/kg dry	1	3/23/22 22:58
4,4'-DDT	0.00585		0.00137	0.00194	mg/kg dry	1	3/23/22 22:58

2030609-06 (Soil)

Sample Name: HAP-6

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.72		0.117	1.63	mg/kg dry	1	3/17/22 20:25
Lead	16.3		0.136	1.63	mg/kg dry	1	3/17/22 20:25

2030609-07 (Soil)

Sample Name: HAP-7

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.07		0.132	1.85	mg/kg dry	1	3/17/22 20:27
Lead	35.1		0.154	1.85	mg/kg dry	1	3/17/22 20:27

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.00702		0.00105	0.00192	mg/kg dry	1	3/23/22 23:43
4,4'-DDT	0.00321		0.00136	0.00192	mg/kg dry	1	3/23/22 23:43

2030609-08 (Soil)

Sample Name: HAP-8

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.07		0.113	1.59	mg/kg dry	1	3/17/22 20:30
Lead	39.4		0.132	1.59	mg/kg dry	1	3/17/22 20:30

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 H - Indicates a Hold Time violation  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit, RL - Reporting limit





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## Positive Results Only Summary

2030609-08 (Soil)

Sample Name: HAP-8

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.00288		0.000903	0.00165	mg/kg dry	1	3/24/22 0:05
4,4'-DDT [2C]	0.00277		0.00117	0.00165	mg/kg dry	1	3/24/22 0:05

2030609-09 (Soil)

Sample Name: HAP-9

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.41		0.112	1.57	mg/kg dry	1	3/17/22 20:32
Lead	15.8		0.131	1.57	mg/kg dry	1	3/17/22 20:32

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.00190		0.000745	0.00163	mg/kg dry	1	3/24/22 0:27
4,4'-DDE	0.0372		0.000890	0.00163	mg/kg dry	1	3/24/22 0:27
4,4'-DDT [2C]	0.0121		0.00115	0.00163	mg/kg dry	1	3/24/22 0:27

2030609-10 (Soil)

Sample Name: HAP-10

SW 846 6010D - Total Metals

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.33		0.125	1.75	mg/kg dry	1	3/19/22 14:23
Lead	40.7		0.146	1.75	mg/kg dry	1	3/19/22 14:23

SW 846 8081B - Pesticides

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDE	0.00564		0.000997	0.00182	mg/kg dry	1	3/24/22 16:30
4,4'-DDT	0.00220		0.00129	0.00182	mg/kg dry	1	3/24/22 16:30

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 H - Indicates a Hold Time violation  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit, RL - Reporting limit

7  
7.



# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-01 (Soil)</b>	Sample Name: <b>HAP-1</b>	Collected: <b>3/10/2022 9:00:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.17		0.121	1.70	mg/kg	1	3/17/22 20:12
Lead	22.8		0.142	1.70	mg/kg	1	3/17/22 20:12

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	0.000914	J	0.000807	0.00176	mg/kg	1	3/23/22 21:29
4,4'-DDE [2C]	0.0163		0.000965	0.00176	mg/kg	1	3/23/22 21:29
4,4'-DDT	0.00253		0.00125	0.00176	mg/kg	1	3/23/22 21:29
Aldrin	ND	U	0.000836	0.00176	mg/kg	1	3/23/22 21:29
alpha-BHC	ND	U	0.000525	0.00176	mg/kg	1	3/23/22 21:29
beta-BHC	ND	U	0.000843	0.00176	mg/kg	1	3/23/22 21:29
Chlordane	ND	U	0.000784	0.00176	mg/kg	1	3/23/22 21:29
delta-BHC	ND	U	0.000819	0.00176	mg/kg	1	3/23/22 21:29
Dieldrin	ND	U	0.000923	0.00176	mg/kg	1	3/23/22 21:29
Endosulfan I	ND	U	0.000833	0.00176	mg/kg	1	3/23/22 21:29
Endosulfan II	ND	U	0.000802	0.00176	mg/kg	1	3/23/22 21:29
Endosulfan sulfate	ND	U	0.000663	0.00176	mg/kg	1	3/23/22 21:29
Endosulfans, Total (alpha and beta)	ND	U	0.000802	0.00176	mg/kg	1	3/23/22 21:29
Endrin	ND	U	0.000609	0.00176	mg/kg	1	3/23/22 21:29
Endrin aldehyde	ND	U	0.000703	0.00176	mg/kg	1	3/23/22 21:29
Endrin ketone	ND	U	0.000621	0.00176	mg/kg	1	3/23/22 21:29
gamma-BHC (Lindane)	ND	U	0.000559	0.00176	mg/kg	1	3/23/22 21:29
Heptachlor	ND	U	0.000472	0.00176	mg/kg	1	3/23/22 21:29
Heptachlor Epoxide	ND	U	0.000890	0.00176	mg/kg	1	3/23/22 21:29
Methoxychlor	ND	U	0.000517	0.00176	mg/kg	1	3/23/22 21:29
Toxaphene	ND	U	0.0850	0.0895	mg/kg	1	3/23/22 21:29

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	73.7				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-02 (Soil)</b>	Sample Name: <b>HAP-2</b>	Collected: <b>3/10/2022 9:20:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	4.47		0.124	1.73	mg/kg	1	3/17/22 20:14
Lead	27.4		0.144	1.73	mg/kg	1	3/17/22 20:14

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000824	0.00180	mg/kg	1	3/23/22 21:52
<b>4,4'-DDE</b>	<b>0.00426</b>		<b>0.000985</b>	<b>0.00180</b>	<b>mg/kg</b>	<b>1</b>	<b>3/23/22 21:52</b>
4,4'-DDT	ND	U	0.00127	0.00180	mg/kg	1	3/23/22 21:52
Aldrin	ND	U	0.000853	0.00180	mg/kg	1	3/23/22 21:52
alpha-BHC	ND	U	0.000536	0.00180	mg/kg	1	3/23/22 21:52
beta-BHC	ND	U	0.000860	0.00180	mg/kg	1	3/23/22 21:52
Chlordane	ND	U	0.000801	0.00180	mg/kg	1	3/23/22 21:52
delta-BHC	ND	U	0.000837	0.00180	mg/kg	1	3/23/22 21:52
Dieldrin	ND	U	0.000942	0.00180	mg/kg	1	3/23/22 21:52
Endosulfan I	ND	U	0.000850	0.00180	mg/kg	1	3/23/22 21:52
Endosulfan II	ND	U	0.000819	0.00180	mg/kg	1	3/23/22 21:52
Endosulfan sulfate	ND	U	0.000677	0.00180	mg/kg	1	3/23/22 21:52
Endosulfans, Total (alpha and beta)	ND	U	0.000819	0.00180	mg/kg	1	3/23/22 21:52
Endrin	ND	U	0.000622	0.00180	mg/kg	1	3/23/22 21:52
Endrin aldehyde	ND	U	0.000717	0.00180	mg/kg	1	3/23/22 21:52
Endrin ketone	ND	U	0.000634	0.00180	mg/kg	1	3/23/22 21:52
gamma-BHC (Lindane)	ND	U	0.000571	0.00180	mg/kg	1	3/23/22 21:52
Heptachlor	ND	U	0.000482	0.00180	mg/kg	1	3/23/22 21:52
Heptachlor Epoxide	ND	U	0.000909	0.00180	mg/kg	1	3/23/22 21:52
Methoxychlor	ND	U	0.000528	0.00180	mg/kg	1	3/23/22 21:52
Toxaphene	ND	U	0.0867	0.0914	mg/kg	1	3/23/22 21:52

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	72.2				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-03 (Soil)</b>	Sample Name: <b>HAP-3</b>	Collected: <b>3/10/2022 9:40:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.01		0.109	1.52	mg/kg	1	3/17/22 20:17
Lead	14.8		0.127	1.52	mg/kg	1	3/17/22 20:17

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.00137	J	0.000725	0.00158	mg/kg	1	3/23/22 22:14
4,4'-DDE	0.0169		0.000866	0.00158	mg/kg	1	3/23/22 22:14
4,4'-DDT	0.00700		0.00112	0.00158	mg/kg	1	3/23/22 22:14
Aldrin	ND	U	0.000750	0.00158	mg/kg	1	3/23/22 22:14
alpha-BHC	ND	U	0.000471	0.00158	mg/kg	1	3/23/22 22:14
beta-BHC	ND	U	0.000757	0.00158	mg/kg	1	3/23/22 22:14
Chlordane	ND	U	0.000704	0.00158	mg/kg	1	3/23/22 22:14
delta-BHC	ND	U	0.000736	0.00158	mg/kg	1	3/23/22 22:14
Dieldrin	ND	U	0.000828	0.00158	mg/kg	1	3/23/22 22:14
Endosulfan I	ND	U	0.000748	0.00158	mg/kg	1	3/23/22 22:14
Endosulfan II	ND	U	0.000720	0.00158	mg/kg	1	3/23/22 22:14
Endosulfan sulfate	ND	U	0.000596	0.00158	mg/kg	1	3/23/22 22:14
Endosulfans, Total (alpha and beta)	ND	U	0.000720	0.00158	mg/kg	1	3/23/22 22:14
Endrin	ND	U	0.000547	0.00158	mg/kg	1	3/23/22 22:14
Endrin aldehyde	ND	U	0.000631	0.00158	mg/kg	1	3/23/22 22:14
Endrin ketone	ND	U	0.000558	0.00158	mg/kg	1	3/23/22 22:14
gamma-BHC (Lindane)	ND	U	0.000502	0.00158	mg/kg	1	3/23/22 22:14
Heptachlor	ND	U	0.000424	0.00158	mg/kg	1	3/23/22 22:14
Heptachlor Epoxide	ND	U	0.000799	0.00158	mg/kg	1	3/23/22 22:14
Methoxychlor	ND	U	0.000464	0.00158	mg/kg	1	3/23/22 22:14
Toxaphene	ND	U	0.0763	0.0804	mg/kg	1	3/23/22 22:14

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	82.1				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-04 (Soil)</b>	Sample Name: <b>HAP-4</b>	Collected: <b>3/10/2022 10:15:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.36		0.122	1.71	mg/kg	1	3/17/22 20:20
Lead	24.0		0.142	1.71	mg/kg	1	3/17/22 20:20

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000812	0.00177	mg/kg	1	3/23/22 22:36
<b>4,4'-DDE</b>	<b>0.00373</b>		<b>0.000970</b>	<b>0.00177</b>	<b>mg/kg</b>	<b>1</b>	<b>3/23/22 22:36</b>
4,4'-DDT	ND	U	0.00125	0.00177	mg/kg	1	3/23/22 22:36
Aldrin	ND	U	0.000840	0.00177	mg/kg	1	3/23/22 22:36
alpha-BHC	ND	U	0.000528	0.00177	mg/kg	1	3/23/22 22:36
beta-BHC	ND	U	0.000847	0.00177	mg/kg	1	3/23/22 22:36
Chlordane	ND	U	0.000789	0.00177	mg/kg	1	3/23/22 22:36
delta-BHC	ND	U	0.000824	0.00177	mg/kg	1	3/23/22 22:36
Dieldrin	ND	U	0.000928	0.00177	mg/kg	1	3/23/22 22:36
Endosulfan I	ND	U	0.000838	0.00177	mg/kg	1	3/23/22 22:36
Endosulfan II	ND	U	0.000806	0.00177	mg/kg	1	3/23/22 22:36
Endosulfan sulfate	ND	U	0.000667	0.00177	mg/kg	1	3/23/22 22:36
Endosulfans, Total (alpha and beta)	ND	U	0.000806	0.00177	mg/kg	1	3/23/22 22:36
Endrin	ND	U	0.000613	0.00177	mg/kg	1	3/23/22 22:36
Endrin aldehyde	ND	U	0.000707	0.00177	mg/kg	1	3/23/22 22:36
Endrin ketone	ND	U	0.000625	0.00177	mg/kg	1	3/23/22 22:36
gamma-BHC (Lindane)	ND	U	0.000562	0.00177	mg/kg	1	3/23/22 22:36
Heptachlor	ND	U	0.000475	0.00177	mg/kg	1	3/23/22 22:36
Heptachlor Epoxide	ND	U	0.000895	0.00177	mg/kg	1	3/23/22 22:36
Methoxychlor	ND	U	0.000520	0.00177	mg/kg	1	3/23/22 22:36
Toxaphene	ND	U	0.0854	0.0901	mg/kg	1	3/23/22 22:36

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	73.3				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit



# All Results Summary

**Client:** Sesi Consulting Engineers

**Work Order:** 2030609

**Project:** 2300 Catherine St.

**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-05 (Soil)</b>	Sample Name: <b>HAP-5</b>	Collected: <b>3/10/2022 10:30:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.80		0.133	1.86	mg/kg	1	3/17/22 20:22
Lead	25.8		0.155	1.86	mg/kg	1	3/17/22 20:22

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.000953	J	0.000886	0.00194	mg/kg	1	3/23/22 22:58
4,4'-DDE [2C]	0.0425		0.00106	0.00194	mg/kg	1	3/23/22 22:58
4,4'-DDT	0.00585		0.00137	0.00194	mg/kg	1	3/23/22 22:58
Aldrin	ND	U	0.000918	0.00194	mg/kg	1	3/23/22 22:58
alpha-BHC	ND	U	0.000577	0.00194	mg/kg	1	3/23/22 22:58
beta-BHC	ND	U	0.000925	0.00194	mg/kg	1	3/23/22 22:58
Chlordane	ND	U	0.000861	0.00194	mg/kg	1	3/23/22 22:58
delta-BHC	ND	U	0.000900	0.00194	mg/kg	1	3/23/22 22:58
Dieldrin	ND	U	0.00101	0.00194	mg/kg	1	3/23/22 22:58
Endosulfan I	ND	U	0.000915	0.00194	mg/kg	1	3/23/22 22:58
Endosulfan II	ND	U	0.000880	0.00194	mg/kg	1	3/23/22 22:58
Endosulfan sulfate	ND	U	0.000728	0.00194	mg/kg	1	3/23/22 22:58
Endosulfans, Total (alpha and beta)	ND	U	0.000880	0.00194	mg/kg	1	3/23/22 22:58
Endrin	ND	U	0.000669	0.00194	mg/kg	1	3/23/22 22:58
Endrin aldehyde	ND	U	0.000772	0.00194	mg/kg	1	3/23/22 22:58
Endrin ketone	ND	U	0.000682	0.00194	mg/kg	1	3/23/22 22:58
gamma-BHC (Lindane)	ND	U	0.000614	0.00194	mg/kg	1	3/23/22 22:58
Heptachlor	ND	U	0.000518	0.00194	mg/kg	1	3/23/22 22:58
Heptachlor Epoxide	ND	U	0.000977	0.00194	mg/kg	1	3/23/22 22:58
Methoxychlor	ND	U	0.000568	0.00194	mg/kg	1	3/23/22 22:58
Toxaphene	ND	U	0.0933	0.0983	mg/kg	1	3/23/22 22:58

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	67.1				%	1	3/11/22 10:31

ND, U - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 H - Indicates a Hold Time violation  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit, RL - Reporting limit

# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-06 (Soil)</b>	Sample Name: <b>HAP-6</b>	Collected: <b>3/10/2022 11:00:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.72		0.117	1.63	mg/kg	1	3/17/22 20:25
Lead	16.3		0.136	1.63	mg/kg	1	3/17/22 20:25

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000777	0.00170	mg/kg	1	3/23/22 23:21
4,4'-DDE	ND	U	0.000929	0.00170	mg/kg	1	3/23/22 23:21
4,4'-DDT	ND	U	0.00120	0.00170	mg/kg	1	3/23/22 23:21
Aldrin	ND	U	0.000805	0.00170	mg/kg	1	3/23/22 23:21
alpha-BHC	ND	U	0.000506	0.00170	mg/kg	1	3/23/22 23:21
beta-BHC	ND	U	0.000811	0.00170	mg/kg	1	3/23/22 23:21
Chlordane	ND	U	0.000755	0.00170	mg/kg	1	3/23/22 23:21
delta-BHC	ND	U	0.000789	0.00170	mg/kg	1	3/23/22 23:21
Dieldrin	ND	U	0.000888	0.00170	mg/kg	1	3/23/22 23:21
Endosulfan I	ND	U	0.000802	0.00170	mg/kg	1	3/23/22 23:21
Endosulfan II	ND	U	0.000772	0.00170	mg/kg	1	3/23/22 23:21
Endosulfan sulfate	ND	U	0.000639	0.00170	mg/kg	1	3/23/22 23:21
Endosulfans, Total (alpha and beta)	ND	U	0.000772	0.00170	mg/kg	1	3/23/22 23:21
Endrin	ND	U	0.000587	0.00170	mg/kg	1	3/23/22 23:21
Endrin aldehyde	ND	U	0.000677	0.00170	mg/kg	1	3/23/22 23:21
Endrin ketone	ND	U	0.000598	0.00170	mg/kg	1	3/23/22 23:21
gamma-BHC (Lindane)	ND	U	0.000538	0.00170	mg/kg	1	3/23/22 23:21
Heptachlor	ND	U	0.000455	0.00170	mg/kg	1	3/23/22 23:21
Heptachlor Epoxide	ND	U	0.000857	0.00170	mg/kg	1	3/23/22 23:21
Methoxychlor	ND	U	0.000498	0.00170	mg/kg	1	3/23/22 23:21
Toxaphene	ND	U	0.0818	0.0862	mg/kg	1	3/23/22 23:21

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	76.5				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-07 (Soil)</b>	Sample Name: <b>HAP-7</b>	Collected: <b>3/10/2022 11:20:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.07		0.132	1.85	mg/kg	1	3/17/22 20:27
Lead	35.1		0.154	1.85	mg/kg	1	3/17/22 20:27

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	ND	U	0.000878	0.00192	mg/kg	1	3/23/22 23:43
<b>4,4'-DDE</b>	<b>0.00702</b>		<b>0.00105</b>	<b>0.00192</b>	<b>mg/kg</b>	<b>1</b>	<b>3/23/22 23:43</b>
<b>4,4'-DDT</b>	<b>0.00321</b>		<b>0.00136</b>	<b>0.00192</b>	<b>mg/kg</b>	<b>1</b>	<b>3/23/22 23:43</b>
Aldrin	ND	U	0.000909	0.00192	mg/kg	1	3/23/22 23:43
alpha-BHC	ND	U	0.000571	0.00192	mg/kg	1	3/23/22 23:43
beta-BHC	ND	U	0.000917	0.00192	mg/kg	1	3/23/22 23:43
Chlordane	ND	U	0.000853	0.00192	mg/kg	1	3/23/22 23:43
delta-BHC	ND	U	0.000892	0.00192	mg/kg	1	3/23/22 23:43
Dieldrin	ND	U	0.00100	0.00192	mg/kg	1	3/23/22 23:43
Endosulfan I	ND	U	0.000906	0.00192	mg/kg	1	3/23/22 23:43
Endosulfan II	ND	U	0.000872	0.00192	mg/kg	1	3/23/22 23:43
Endosulfan sulfate	ND	U	0.000722	0.00192	mg/kg	1	3/23/22 23:43
Endosulfans, Total (alpha and beta)	ND	U	0.000872	0.00192	mg/kg	1	3/23/22 23:43
Endrin	ND	U	0.000663	0.00192	mg/kg	1	3/23/22 23:43
Endrin aldehyde	ND	U	0.000765	0.00192	mg/kg	1	3/23/22 23:43
Endrin ketone	ND	U	0.000676	0.00192	mg/kg	1	3/23/22 23:43
gamma-BHC (Lindane)	ND	U	0.000608	0.00192	mg/kg	1	3/23/22 23:43
Heptachlor	ND	U	0.000514	0.00192	mg/kg	1	3/23/22 23:43
Heptachlor Epoxide	ND	U	0.000968	0.00192	mg/kg	1	3/23/22 23:43
Methoxychlor	ND	U	0.000562	0.00192	mg/kg	1	3/23/22 23:43
Toxaphene	ND	U	0.0924	0.0974	mg/kg	1	3/23/22 23:43

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	67.7				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-08 (Soil)</b>	Sample Name: <b>HAP-8</b>	Collected: <b>3/10/2022 11:45:00AM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.07		0.113	1.59	mg/kg	1	3/17/22 20:30
Lead	39.4		0.132	1.59	mg/kg	1	3/17/22 20:30

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000755	0.00165	mg/kg	1	3/24/22 0:05
4,4'-DDE	0.00288		0.000903	0.00165	mg/kg	1	3/24/22 0:05
4,4'-DDT [2C]	0.00277		0.00117	0.00165	mg/kg	1	3/24/22 0:05
Aldrin	ND	U	0.000782	0.00165	mg/kg	1	3/24/22 0:05
alpha-BHC	ND	U	0.000491	0.00165	mg/kg	1	3/24/22 0:05
beta-BHC	ND	U	0.000788	0.00165	mg/kg	1	3/24/22 0:05
Chlordane	ND	U	0.000734	0.00165	mg/kg	1	3/24/22 0:05
delta-BHC	ND	U	0.000767	0.00165	mg/kg	1	3/24/22 0:05
Dieldrin	ND	U	0.000863	0.00165	mg/kg	1	3/24/22 0:05
Endosulfan I	ND	U	0.000779	0.00165	mg/kg	1	3/24/22 0:05
Endosulfan II	ND	U	0.000750	0.00165	mg/kg	1	3/24/22 0:05
Endosulfan sulfate	ND	U	0.000621	0.00165	mg/kg	1	3/24/22 0:05
Endosulfans, Total (alpha and beta)	ND	U	0.000750	0.00165	mg/kg	1	3/24/22 0:05
Endrin	ND	U	0.000570	0.00165	mg/kg	1	3/24/22 0:05
Endrin aldehyde	ND	U	0.000658	0.00165	mg/kg	1	3/24/22 0:05
Endrin ketone	ND	U	0.000581	0.00165	mg/kg	1	3/24/22 0:05
gamma-BHC (Lindane)	ND	U	0.000523	0.00165	mg/kg	1	3/24/22 0:05
Heptachlor	ND	U	0.000442	0.00165	mg/kg	1	3/24/22 0:05
Heptachlor Epoxide	ND	U	0.000833	0.00165	mg/kg	1	3/24/22 0:05
Methoxychlor	ND	U	0.000484	0.00165	mg/kg	1	3/24/22 0:05
Toxaphene	ND	U	0.0795	0.0838	mg/kg	1	3/24/22 0:05

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	78.8				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit



# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-09 (Soil)</b>	Sample Name: <b>HAP-9</b>	Collected: <b>3/10/2022 12:05:00PM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	3.41		0.112	1.57	mg/kg	1	3/17/22 20:32
Lead	15.8		0.131	1.57	mg/kg	1	3/17/22 20:32

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD [2C]	0.00190		0.000745	0.00163	mg/kg	1	3/24/22 0:27
4,4'-DDE	0.0372		0.000890	0.00163	mg/kg	1	3/24/22 0:27
4,4'-DDT [2C]	0.0121		0.00115	0.00163	mg/kg	1	3/24/22 0:27
Aldrin	ND	U	0.000771	0.00163	mg/kg	1	3/24/22 0:27
alpha-BHC	ND	U	0.000485	0.00163	mg/kg	1	3/24/22 0:27
beta-BHC	ND	U	0.000778	0.00163	mg/kg	1	3/24/22 0:27
Chlordane	ND	U	0.000724	0.00163	mg/kg	1	3/24/22 0:27
delta-BHC	ND	U	0.000756	0.00163	mg/kg	1	3/24/22 0:27
Dieldrin	ND	U	0.000851	0.00163	mg/kg	1	3/24/22 0:27
Endosulfan I	ND	U	0.000769	0.00163	mg/kg	1	3/24/22 0:27
Endosulfan II	ND	U	0.000740	0.00163	mg/kg	1	3/24/22 0:27
Endosulfan sulfate	ND	U	0.000612	0.00163	mg/kg	1	3/24/22 0:27
Endosulfans, Total (alpha and beta)	ND	U	0.000740	0.00163	mg/kg	1	3/24/22 0:27
Endrin	ND	U	0.000562	0.00163	mg/kg	1	3/24/22 0:27
Endrin aldehyde	ND	U	0.000649	0.00163	mg/kg	1	3/24/22 0:27
Endrin ketone	ND	U	0.000573	0.00163	mg/kg	1	3/24/22 0:27
gamma-BHC (Lindane)	ND	U	0.000516	0.00163	mg/kg	1	3/24/22 0:27
Heptachlor	ND	U	0.000436	0.00163	mg/kg	1	3/24/22 0:27
Heptachlor Epoxide	ND	U	0.000821	0.00163	mg/kg	1	3/24/22 0:27
Methoxychlor	ND	U	0.000477	0.00163	mg/kg	1	3/24/22 0:27
Toxaphene	ND	U	0.0784	0.0826	mg/kg	1	3/24/22 0:27

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	79.9				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

# All Results Summary

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.

**Work Order:** 2030609  
**Date to Lab:** 3/10/2022 5:50:00PM

<b>2030609-10 (Soil)</b>	Sample Name: <b>HAP-10</b>	Collected: <b>3/10/2022 12:30:00PM</b>
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**SW 846 6010D - Total Metals**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Arsenic	5.33		0.125	1.75	mg/kg	1	3/19/22 14:23
Lead	40.7		0.146	1.75	mg/kg	1	3/19/22 14:23

**SW 846 8081B - Pesticides**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
4,4'-DDD	ND	U	0.000834	0.00182	mg/kg	1	3/24/22 16:30
<b>4,4'-DDE</b>	<b>0.00564</b>		<b>0.000997</b>	<b>0.00182</b>	<b>mg/kg</b>	<b>1</b>	<b>3/24/22 16:30</b>
<b>4,4'-DDT</b>	<b>0.00220</b>		<b>0.00129</b>	<b>0.00182</b>	<b>mg/kg</b>	<b>1</b>	<b>3/24/22 16:30</b>
Aldrin	ND	U	0.000864	0.00182	mg/kg	1	3/24/22 16:30
alpha-BHC	ND	U	0.000543	0.00182	mg/kg	1	3/24/22 16:30
beta-BHC	ND	U	0.000871	0.00182	mg/kg	1	3/24/22 16:30
Chlordane	ND	U	0.000811	0.00182	mg/kg	1	3/24/22 16:30
delta-BHC	ND	U	0.000847	0.00182	mg/kg	1	3/24/22 16:30
Dieldrin	ND	U	0.000954	0.00182	mg/kg	1	3/24/22 16:30
Endosulfan I	ND	U	0.000861	0.00182	mg/kg	1	3/24/22 16:30
Endosulfan II	ND	U	0.000829	0.00182	mg/kg	1	3/24/22 16:30
Endosulfan sulfate	ND	U	0.000686	0.00182	mg/kg	1	3/24/22 16:30
Endosulfans, Total (alpha and beta)	ND	U	0.000829	0.00182	mg/kg	1	3/24/22 16:30
Endrin	ND	U	0.000630	0.00182	mg/kg	1	3/24/22 16:30
Endrin aldehyde	ND	U	0.000726	0.00182	mg/kg	1	3/24/22 16:30
Endrin ketone	ND	U	0.000642	0.00182	mg/kg	1	3/24/22 16:30
gamma-BHC (Lindane)	ND	U	0.000578	0.00182	mg/kg	1	3/24/22 16:30
Heptachlor	ND	U	0.000488	0.00182	mg/kg	1	3/24/22 16:30
Heptachlor Epoxide	ND	U	0.000920	0.00182	mg/kg	1	3/24/22 16:30
Methoxychlor	ND	U	0.000534	0.00182	mg/kg	1	3/24/22 16:30
Toxaphene	ND	U	0.0878	0.0926	mg/kg	1	3/24/22 16:30

**Gravimetric - General Chemistry**

Analyte	Result	Qual	MDL	RL	Units	Dilution	Analyzed
Percent Solids	71.3				%	1	3/11/22 10:31

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit



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# METALS

Sesi Consulting Engineers

Work Order: 2030609

Project: 2300 Catherine St.



# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Blank**  
**Lab Sample ID:** **B2C1111-BLK1**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	2 g / 50 mL	Prep Date:	3/11/2022 8:56:00AM
Matrix:	Soil	Prep Method:	Hot Block ICP Soil

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/28/2022 15:55	ND	mg/kg wet	1.25	1	MS /B2C1111
7439-92-1	Lead	03/28/2022 15:55	ND	mg/kg wet	1.25	1	MS /B2C1111

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I



# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Calibration Blank**  
**Lab Sample ID:** **S2C1620-CCB1**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/16/2022 10:00:16AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/16/2022 20:51	ND	mg/L	0.0500	1	MS S2C1620/S2C1620
7439-92-1	Lead	03/16/2022 20:51	ND	mg/L	0.0500	1	MS S2C1620/S2C1620

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Calibration Blank**  
**Lab Sample ID:** **S2C1620-CCB2**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/16/2022 10:00:16AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/16/2022 23:29	ND	mg/L	0.0500	1	MS S2C1620/S2C1620
7439-92-1	Lead	03/16/2022 23:29	ND	mg/L	0.0500	1	MS S2C1620/S2C1620

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Initial Cal Blank**  
**Lab Sample ID:** **S2C1620-ICB1**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/16/2022 10:00:16AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/16/2022 18:26	ND	mg/L	0.0500	1	MS S2C1620/S2C1620
7439-92-1	Lead	03/16/2022 18:26	ND	mg/L	0.0500	1	MS S2C1620/S2C1620

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

# ANALYSIS DATA SHEET

**Client:** Sesí Consulting Engineers  
**Client Sample ID:** Calibration Blank  
**Lab Sample ID:** S2C2102-CCB1  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Init/Final Vol:	N/A	Prep Date:	3/19/2022 7:00:56AM
Matrix:	Soil	Prep Method:	

## Total Metals - Aqueous (SW 846 6010D)

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/19/2022 12:32	ND	mg/L	0.0500	1	MS S2C2102/S2C2102
7439-92-1	Lead	03/19/2022 12:32	ND	mg/L	0.0500	1	MS S2C2102/S2C2102

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I



# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Calibration Blank**  
**Lab Sample ID:** **S2C2102-CCB2**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/19/2022 7:00:56AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/19/2022 13:36	ND	mg/L	0.0500	1	MS S2C2102/S2C2102
7439-92-1	Lead	03/19/2022 13:36	ND	mg/L	0.0500	1	MS S2C2102/S2C2102

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Calibration Blank**  
**Lab Sample ID:** **S2C2102-CCB3**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/19/2022 7:00:56AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/19/2022 14:11	ND	mg/L	0.0500	1	MS S2C2102/S2C2102
7439-92-1	Lead	03/19/2022 14:11	ND	mg/L	0.0500	1	MS S2C2102/S2C2102

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Calibration Blank**  
**Lab Sample ID:** **S2C2102-CCB4**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/19/2022 7:00:56AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/19/2022 14:42	ND	mg/L	0.0500	1	MS S2C2102/S2C2102
7439-92-1	Lead	03/19/2022 14:42	ND	mg/L	0.0500	1	MS S2C2102/S2C2102

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Calibration Blank**  
**Lab Sample ID:** **S2C2102-CCB5**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/19/2022 7:00:56AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/19/2022 14:59	ND	mg/L	0.0500	1	MS S2C2102/S2C2102
7439-92-1	Lead	03/19/2022 14:59	ND	mg/L	0.0500	1	MS S2C2102/S2C2102

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I

# ANALYSIS DATA SHEET

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **Initial Cal Blank**  
**Lab Sample ID:** **S2C2102-ICB1**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Init/Final Vol:	N/A	Prep Date:	3/19/2022 7:00:56AM
Matrix:	Soil	Prep Method:	

**Total Metals - Aqueous (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Concentration	Units	RL	DF	Analyst Sequence/Batch
7440-38-2	Arsenic	03/19/2022 09:22	ND	mg/L	0.0500	1	MS S2C2102/S2C2102
7439-92-1	Lead	03/19/2022 09:22	ND	mg/L	0.0500	1	MS S2C2102/S2C2102

9.1.

ND - Indicates compound analyzed for but not detected

RL - Reporting limit  
DF - Dilution Factor

F-I



# ANALYSIS DATA SHEET

**Client:**                   Sesi Consulting Engineers  
**Client Sample ID:**     HAP-1  
**Lab Sample ID:**        2030609-01  
**Project:**                2300 Catherine St.  
**Work Order:**           2030609

Date Sampled: 03/10/22 09:00	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 73.71	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:12	4.17	mg/kg dry	1.70	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:12	22.8	mg/kg dry	1.70	1		MS	S2C1620/B2C1111

9  
9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-1

# ANALYSIS DATA SHEET

**Client:**                   Sesi Consulting Engineers  
**Client Sample ID:**     HAP-2  
**Lab Sample ID:**        2030609-02  
**Project:**                2300 Catherine St.  
**Work Order:**           2030609

Date Sampled: 03/10/22 09:20	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 72.20	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:14	4.47	mg/kg dry	1.73	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:14	27.4	mg/kg dry	1.73	1		MS	S2C1620/B2C1111

9  
9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-1

# ANALYSIS DATA SHEET

**Client:**                   Sesi Consulting Engineers  
**Client Sample ID:**     HAP-3  
**Lab Sample ID:**        2030609-03  
**Project:**                 2300 Catherine St.  
**Work Order:**            2030609

Date Sampled: 03/10/22 09:40	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 82.09	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:17	3.01	mg/kg dry	1.52	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:17	14.8	mg/kg dry	1.52	1		MS	S2C1620/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-1

# ANALYSIS DATA SHEET

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-4  
**Lab Sample ID:** 2030609-04  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 10:15	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 73.29	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:20	5.36	mg/kg dry	1.71	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:20	24.0	mg/kg dry	1.71	1		MS	S2C1620/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-1

# ANALYSIS DATA SHEET

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-5  
**Lab Sample ID:** 2030609-05  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 10:30	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 67.13	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:22	3.80	mg/kg dry	1.86	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:22	25.8	mg/kg dry	1.86	1		MS	S2C1620/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-1



# ANALYSIS DATA SHEET

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-6  
**Lab Sample ID:** 2030609-06  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 11:00	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 76.55	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:25	3.72	mg/kg dry	1.63	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:25	16.3	mg/kg dry	1.63	1		MS	S2C1620/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor

**B** - Indicates compound found in associated blank

F-I

# ANALYSIS DATA SHEET

**Client:** Sesu Consulting Engineers  
**Client Sample ID:** HAP-7  
**Lab Sample ID:** 2030609-07  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 11:20	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 67.75	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:27	3.07	mg/kg dry	1.85	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:27	35.1	mg/kg dry	1.85	1		MS	S2C1620/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-1

# ANALYSIS DATA SHEET

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-8  
**Lab Sample ID:** 2030609-08  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 11:45	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 78.78	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:30	3.07	mg/kg dry	1.59	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:30	39.4	mg/kg dry	1.59	1		MS	S2C1620/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-I

# ANALYSIS DATA SHEET

**Client:** Sesí Consulting Engineers  
**Client Sample ID:** HAP-9  
**Lab Sample ID:** 2030609-09  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 12:05	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 79.87	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/17/22 20:32	3.41	mg/kg dry	1.57	1		MS	S2C1620/B2C1111
7439-92-1	Lead	03/17/22 20:32	15.8	mg/kg dry	1.57	1		MS	S2C1620/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-1

# ANALYSIS DATA SHEET

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-10  
**Lab Sample ID:** 2030609-10  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 12:30	Prep Date: 03/11/22 08:56
Init/Final Vol: 2 g / 50 mL	Prep Method: Hot Block ICP Soil
Matrix: Soil	
Percent Solids: 71.31	

**Total Metals - Soil (SW 846 6010D)**

CAS NO.	Analyte	Analyzed	Conc.	Units	RL	DF	Qual	Analyst	Sequence/Batch
7440-38-2	Arsenic	03/19/22 14:23	5.33	mg/kg dry	1.75	1		MS	S2C2102/B2C1111
7439-92-1	Lead	03/19/22 14:23	40.7	mg/kg dry	1.75	1		MS	S2C2102/B2C1111

9.2.

**ND, U** - Indicates compound analyzed for but not detected  
**D** - Indicates result is based on a dilution  
**E** - Concentration exceeds highest calibration standard  
**H** - Indicates a Hold Time violation

**RL** - Reporting limit  
**DF** - Dilution Factor  
**B** - Indicates compound found in associated blank

F-I



**Total Metals - Quality Control**  
**Aqua Pro-Tech Laboratories**

Batch B2C1111		Method: SW 846 6010D			Prepared: 03/11/2022			
B2C1111-BS1		Source:						
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	11.2	mg/kg wet	12.5		89.6	80-120		
Lead	10.4	mg/kg wet	12.5		82.8	80-120		

Batch B2C1111 (cont.)		Method: SW 846 6010D			Prepared: 03/11/2022			
B2C1111-DUP1		Source: 2030609-10						
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	ND	mg/kg dry		5.33				20
Lead	24.3	mg/kg dry		40.7			50.4*	20

Batch B2C1111 (cont.)		Method: SW 846 6010D			Prepared: 03/11/2022			
B2C1111-MS1		Source: 2030609-10						
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	13.6	mg/kg dry	17.5	5.33	47.0*	75-125		
Lead	33.9	mg/kg dry	17.5	40.7	-38.4*	75-125		

Batch B2C1111 (cont.)		Method: SW 846 6010D			Prepared: 03/11/2022			
B2C1111-MSD1		Source: 2030609-10						
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	15.0	mg/kg dry	17.5	5.33	55.4*	75-125	10.3	20
Lead	37.2	mg/kg dry	17.5	40.7	-20.0*	75-125	9.07	20

Batch B2C1111 (cont.)		Method: SW 846 6010D			Prepared: 03/11/2022			
B2C1111-PS1		Source: 2030609-10						
Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Arsenic	0.476	mg/L	0.500	0.152 J	64.8*	75-125		
Lead	1.14	mg/L	0.500	1.16 J	-4.00*	75-125		

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
 NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III



9.3.

## METHOD BLANK SUMMARY

Batch ID: B2C1111

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B2C1111-BLK1	BLK1	03/11/2022	03/28/2022 15:55
B2C1111-BS1	BS1	03/11/2022	03/28/2022 15:59
B2C1111-DUP1	DUP1	03/11/2022	03/28/2022 16:04
B2C1111-MS1	MS1	03/11/2022	03/28/2022 16:09
B2C1111-MSD1	MSD1	03/11/2022	03/28/2022 16:14
B2C1111-PS1	PS1	03/11/2022	03/28/2022 16:20
2030609-01	HAP-1	03/11/2022	03/17/2022 20:12
2030609-02	HAP-2	03/11/2022	03/17/2022 20:14
2030609-03	HAP-3	03/11/2022	03/17/2022 20:17
2030609-04	HAP-4	03/11/2022	03/17/2022 20:20
2030609-05	HAP-5	03/11/2022	03/17/2022 20:22
2030609-06	HAP-6	03/11/2022	03/17/2022 20:25
2030609-07	HAP-7	03/11/2022	03/17/2022 20:27
2030609-08	HAP-8	03/11/2022	03/17/2022 20:30
2030609-09	HAP-9	03/11/2022	03/17/2022 20:32
2030609-10	HAP-10	03/11/2022	03/19/2022 14:23



9.4.

## ANALYSIS SEQUENCE SUMMARY

Laboratory: Aqua Pro-Tech Laboratories      Work Order: 2030609  
 Client: Sesi Consulting Engineers      Project: 2300 Catherine St.  
 Sequence:      Instrument:

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Blank	B2C1111-BLK1	APL-METHOD_IEC-2022-03-28	03/28/22 15:55
LCS	B2C1111-BS1	APL-METHOD_IEC-2022-03-28	03/28/22 15:59
Duplicate	B2C1111-DUP1	APL-METHOD_IEC-2022-03-28	03/28/22 16:04
Matrix Spike	B2C1111-MS1	APL-METHOD_IEC-2022-03-28	03/28/22 16:09
Matrix Spike Dup	B2C1111-MSD1	APL-METHOD_IEC-2022-03-28	03/28/22 16:14
Post Spike	B2C1111-PS1	APL-METHOD_IEC-2022-03-28	03/28/22 16:20

## ANALYSIS SEQUENCE SUMMARY

Laboratory: Aqua Pro-Tech Laboratories      Work Order: 2030609  
 Client: Sesi Consulting Engineers      Project: 2300 Catherine St.  
 Sequence: S2C1620      Instrument: ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	S2C1620-SCV1	APL-METHOD_IEC_2022-03-16	03/16/22 18:16
Initial Cal Blank	S2C1620-ICB1	APL-METHOD_IEC_2022-03-16	03/16/22 18:26
Interference Check A	S2C1620-IFA1	APL-METHOD_IEC_2022-03-16	03/16/22 18:28
Interference Check B	S2C1620-IFB1	APL-METHOD_IEC_2022-03-16	03/16/22 18:31
Calibration Check	S2C1620-CCV1	APL-METHOD_IEC_2022-03-16	03/16/22 20:46
Calibration Blank	S2C1620-CCB1	APL-METHOD_IEC_2022-03-16	03/16/22 20:51
Calibration Check	S2C1620-CCV3	APL-METHOD_IEC_2022-03-16	03/16/22 21:47
Calibration Check	S2C1620-CCV4	APL-METHOD_IEC_2022-03-16	03/16/22 21:50
Calibration Blank	S2C1620-CCB2	APL-METHOD_IEC_2022-03-16	03/16/22 23:29
HAP-1	2030609-01	APL-METHOD_IEC_2022-03-16	03/17/22 20:12
HAP-2	2030609-02	APL-METHOD_IEC_2022-03-16	03/17/22 20:14
HAP-3	2030609-03	APL-METHOD_IEC_2022-03-16	03/17/22 20:17
HAP-4	2030609-04	APL-METHOD_IEC_2022-03-16	03/17/22 20:20
HAP-5	2030609-05	APL-METHOD_IEC_2022-03-16	03/17/22 20:22
HAP-6	2030609-06	APL-METHOD_IEC_2022-03-16	03/17/22 20:25
HAP-7	2030609-07	APL-METHOD_IEC_2022-03-16	03/17/22 20:27
HAP-8	2030609-08	APL-METHOD_IEC_2022-03-16	03/17/22 20:30
HAP-9	2030609-09	APL-METHOD_IEC_2022-03-16	03/17/22 20:32

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## ANALYSIS SEQUENCE SUMMARY

Laboratory:	Aqua Pro-Tech Laboratories	Work Order:	2030609
Client:	Sesi Consulting Engineers	Project:	2300 Catherine St.
Sequence:	S2C2102	Instrument:	ICP OES-1

Sample Name	Lab Sample ID	FileID	Analysis Date/Time
Secondary Cal Check	S2C2102-SCV1	APL-METHOD_IEC-2022-03-19	03/19/22 09:08
Initial Cal Blank	S2C2102-ICB1	APL-METHOD_IEC-2022-03-19	03/19/22 09:22
Interference Check A	S2C2102-IFA1	APL-METHOD_IEC-2022-03-19	03/19/22 09:26
Interference Check B	S2C2102-IFB1	APL-METHOD_IEC-2022-03-19	03/19/22 09:31
Calibration Check	S2C2102-CCV1	APL-METHOD_IEC-2022-03-19	03/19/22 12:27
Calibration Blank	S2C2102-CCB1	APL-METHOD_IEC-2022-03-19	03/19/22 12:32
Calibration Check	S2C2102-CCV3	APL-METHOD_IEC-2022-03-19	03/19/22 13:29
Calibration Blank	S2C2102-CCB2	APL-METHOD_IEC-2022-03-19	03/19/22 13:36
Calibration Check	S2C2102-CCV5	APL-METHOD_IEC-2022-03-19	03/19/22 14:06
Calibration Blank	S2C2102-CCB3	APL-METHOD_IEC-2022-03-19	03/19/22 14:11
HAP-10	2030609-10	APL-METHOD_IEC-2022-03-19	03/19/22 14:23
Calibration Check	S2C2102-CCV7	APL-METHOD_IEC-2022-03-19	03/19/22 14:38
Calibration Blank	S2C2102-CCB4	APL-METHOD_IEC-2022-03-19	03/19/22 14:42
Calibration Check	S2C2102-CCV9	APL-METHOD_IEC-2022-03-19	03/19/22 14:54
Calibration Blank	S2C2102-CCB5	APL-METHOD_IEC-2022-03-19	03/19/22 14:59



9.5.

# SEQUENCE CALIBRATION CHECKS

SW 846 6010D

**Client:**           Sesi Consulting Engineers  
**Project:**         2300 Catherine St.  
**Work Order:**    2030609

**Sequence:**       S2C1620  
**Instrument:**    ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2C1620-CCV1	Arsenic	1.00	1.06	106	mg/L	90-110
	Lead	1.00	1.05	105	mg/L	90-110
S2C1620-CCV3	Arsenic	1.00	1.04	104	mg/L	90-110
	Lead	1.00	1.04	104	mg/L	90-110
S2C1620-CCV4	Arsenic		0.00250		mg/L	90-110
	Lead		-0.000900		mg/L	90-110
S2C1620-SCV1	Arsenic	1.00	1.01	101	mg/L	90-110
	Lead	1.00	1.02	102	mg/L	90-110
S2C1620-IFB1	Arsenic	1.00	1.07	107	mg/L	80-120
	Lead	1.00	0.945	94.5	mg/L	80-120

9.6.

ICV = Initial Cal Verification      CCV = Continuing Cal Verification      IFB = Interference Check Standard B  
 SCV = Second Source Cal Verification      LCV = Low Cal Check

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# SEQUENCE CALIBRATION CHECKS

SW 846 6010D

**Client:** Sesi Consulting Engineers  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

**Sequence:** S2C2102  
**Instrument:** ICP OES-1

Lab Sample ID	Analyte	True	Found	%R	Units	Control Limit
S2C2102-SCV1	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.01	101	mg/L	90-110
S2C2102-IFB1	Arsenic	1.00	1.09	109	mg/L	80-120
	Lead	1.00	0.907	90.7	mg/L	80-120
S2C2102-CCV1	Arsenic	1.00	1.05	105	mg/L	90-110
	Lead	1.00	1.03	103	mg/L	90-110
S2C2102-CCV3	Arsenic	1.00	1.03	103	mg/L	90-110
	Lead	1.00	1.02	102	mg/L	90-110
S2C2102-CCV5	Arsenic	1.00	1.02	102	mg/L	90-110
	Lead	1.00	1.01	101	mg/L	90-110
S2C2102-CCV7	Arsenic	1.00	1.01	101	mg/L	90-110
	Lead	1.00	1.01	101	mg/L	90-110
S2C2102-CCV9	Arsenic	1.00	1.01	101	mg/L	90-110
	Lead	1.00	1.00	100	mg/L	90-110

9.6.

ICV = Initial Cal Verification      CCV = Continuing Cal Verification      IFB = Interference Check Standard B  
 SCV = Second Source Cal Verification      LCV = Low Cal Check

F-VII



AQUA PRO-TECH LABORATORIES  
Certified Environmental Testing

# PESTICIDES

Sesi Consulting Engineers

Work Order: 2030609

Project: 2300 Catherine St.

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

Client: **Sesi Consulting Engineers** Project: **2300 Catherine St.**  
Client Sample ID: **Blank** Work Order: **2030609**  
Lab Sample ID: **B2C2230-BLK1**

Init/Final Vol: 15 g / 10 mL	Prep Date: 03/22/2022 12:59	File ID: 7T23669.D
	Prep Batch: B2C2230	Analyzed: 03/23/2022 13:42
	Matrix: Soil	Sequence: S2C2514
	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg wet)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000595	0.00130	U
72-55-9	4,4'-DDE	ND	0.000711	0.00130	U
50-29-3	4,4'-DDT	ND	0.000918	0.00130	U
309-00-2	Aldrin	ND	0.000616	0.00130	U
319-84-6	alpha-BHC	ND	0.000387	0.00130	U
319-85-7	beta-BHC	ND	0.000621	0.00130	U
57-74-9	Chlordane	ND	0.000578	0.00130	U
319-86-8	delta-BHC	ND	0.000604	0.00130	U
60-57-1	Dieldrin	ND	0.000680	0.00130	U
959-98-8	Endosulfan I	ND	0.000614	0.00130	U
33213-65-9	Endosulfan II	ND	0.000591	0.00130	U
1031-07-8	Endosulfan sulfate	ND	0.000489	0.00130	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000591	0.00130	U
72-20-8	Endrin	ND	0.000449	0.00130	U
7421-93-4	Endrin aldehyde	ND	0.000518	0.00130	U
53494-70-5	Endrin ketone	ND	0.000458	0.00130	U
58-89-9	gamma-BHC (Lindane)	ND	0.000412	0.00130	U
76-44-8	Heptachlor	ND	0.000348	0.00130	U
1024-57-3	Heptachlor Epoxide	ND	0.000656	0.00130	U
72-43-5	Methoxychlor	ND	0.000381	0.00130	U
8001-35-2	Toxaphene	ND	0.0626	0.0660	U

10  
10.1.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23669.D\ECD1A.CH Vial: 4  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23669.D\ECD2B.CH  
 Acq On : 23 Mar 2022 13:42 Operator: sdp  
 Sample : B2C2230-BLK1 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 25 13:26 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1844.3E6	865.5E6	52.604	53.735
Spiked Amount	50.000	Range	43 - 129	Recovery	= 105.21%	107.47%
21) S Decachlorobiphen	15.43	17.97	1624.4E6	661.0E6	48.321	48.996m
Spiked Amount	50.000	Range	42 - 136	Recovery	= 96.64%	97.99%
Target Compounds						
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.1.

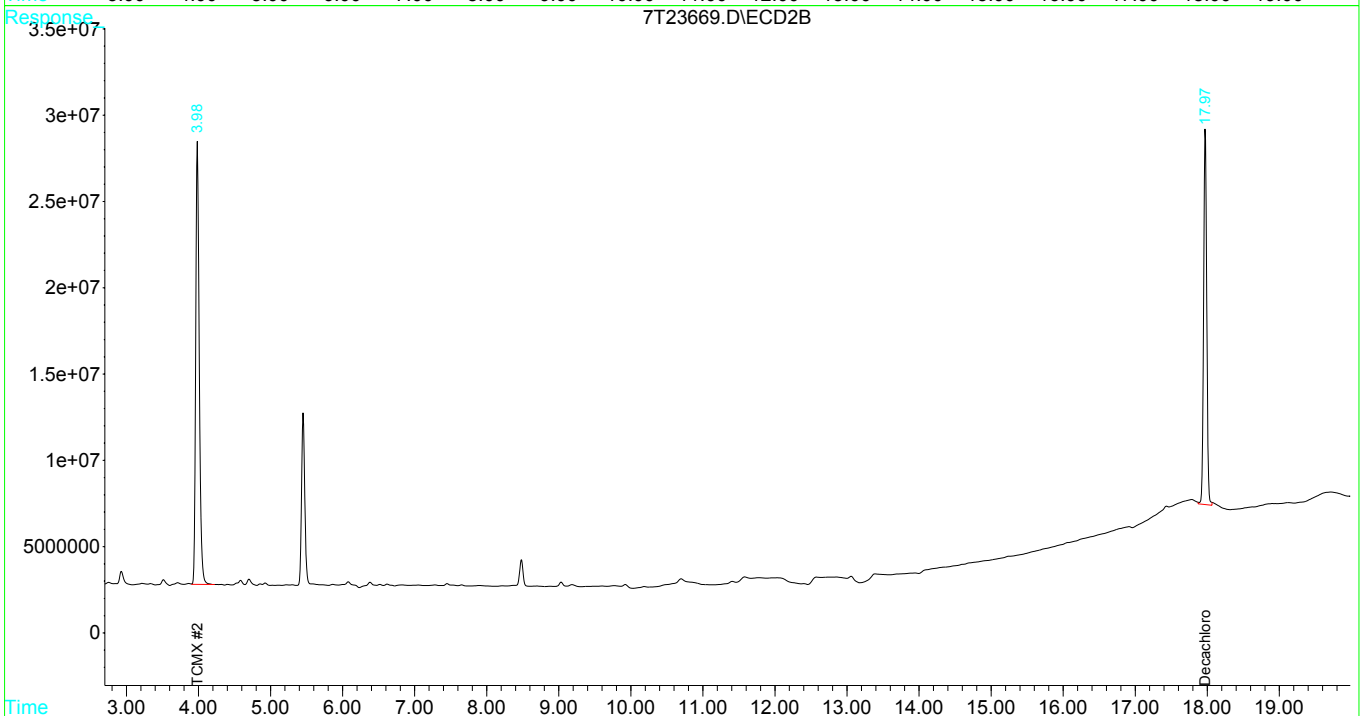
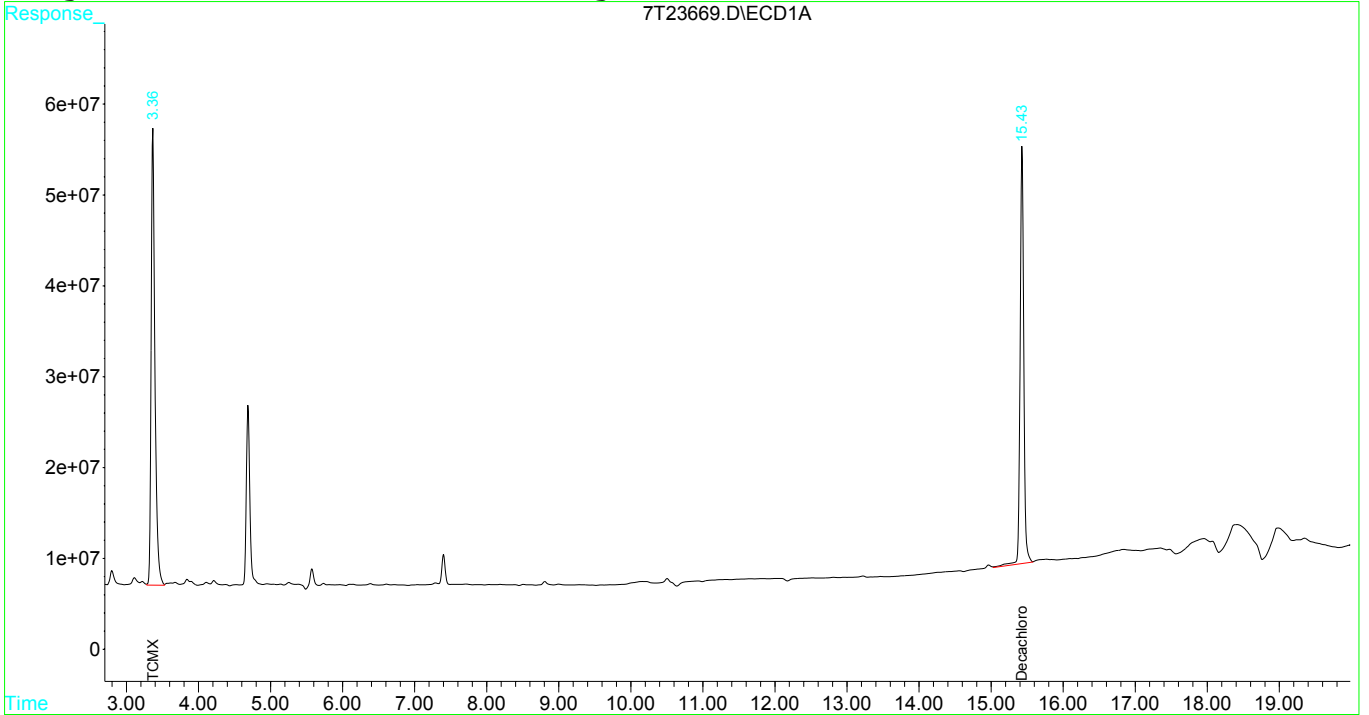
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23669.D 80810302.M Fri Mar 25 16:40:32 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23669.D\ECD1A.CH Vial: 4  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23669.D\ECD2B.CH  
Acq On : 23 Mar 2022 13:42 Operator: sdp  
Sample : B2C2230-BLK1 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 25 13:26 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.1.



# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-1  
**Lab Sample ID:** 2030609-01  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 09:00	Prep Date: 03/22/22 12:59	File ID: 7T23690.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/23/22 21:29
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 73.71	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	0.000914	0.000807	0.00176	J
72-55-9	4,4'-DDE [2C]	0.0163	0.000965	0.00176	
50-29-3	4,4'-DDT	0.00253	0.00125	0.00176	
309-00-2	Aldrin	ND	0.000836	0.00176	U
319-84-6	alpha-BHC	ND	0.000525	0.00176	U
319-85-7	beta-BHC	ND	0.000843	0.00176	U
57-74-9	Chlordane	ND	0.000784	0.00176	U
319-86-8	delta-BHC	ND	0.000819	0.00176	U
60-57-1	Dieldrin	ND	0.000923	0.00176	U
959-98-8	Endosulfan I	ND	0.000833	0.00176	U
33213-65-9	Endosulfan II	ND	0.000802	0.00176	U
1031-07-8	Endosulfan sulfate	ND	0.000663	0.00176	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000802	0.00176	U
72-20-8	Endrin	ND	0.000609	0.00176	U
7421-93-4	Endrin aldehyde	ND	0.000703	0.00176	U
53494-70-5	Endrin ketone	ND	0.000621	0.00176	U
58-89-9	gamma-BHC (Lindane)	ND	0.000559	0.00176	U
76-44-8	Heptachlor	ND	0.000472	0.00176	U
1024-57-3	Heptachlor Epoxide	ND	0.000890	0.00176	U
72-43-5	Methoxychlor	ND	0.000517	0.00176	U
8001-35-2	Toxaphene	ND	0.0850	0.0895	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23690.D\ECD1A.CH Vial: 24  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23690.D\ECD2B.CH  
 Acq On : 23 Mar 2022 21:29 Operator: sdp  
 Sample : 2030609-01 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:08 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1812.7E6	899.3E6	51.704	55.838
Spiked Amount	50.000	Range	43 - 129	Recovery	= 103.41%	111.68%
21) S Decachlorobiphen	15.43	17.97	1645.1E6	647.5E6	48.939	47.994m
Spiked Amount	50.000	Range	42 - 136	Recovery	= 97.88%	95.99%
Target Compounds						
10) 4,4'-DDE	7.78	9.90	805.8E6	315.7E6	20.234	17.992
13) 4,4'-DDD	9.13	11.51	32077121	20551217	1.012m	1.428m#
15) M 4,4'-DDT	9.79	12.55	93729924	59387355	2.800m	4.108 #
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2.

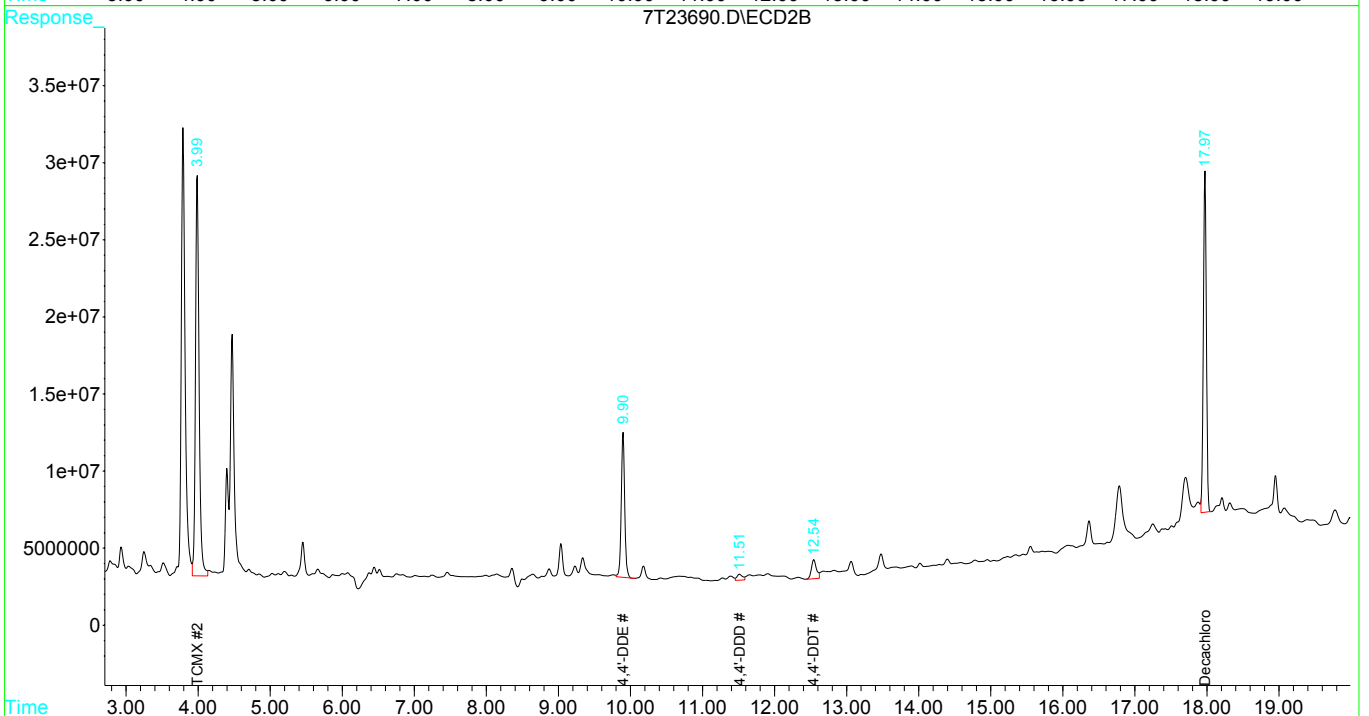
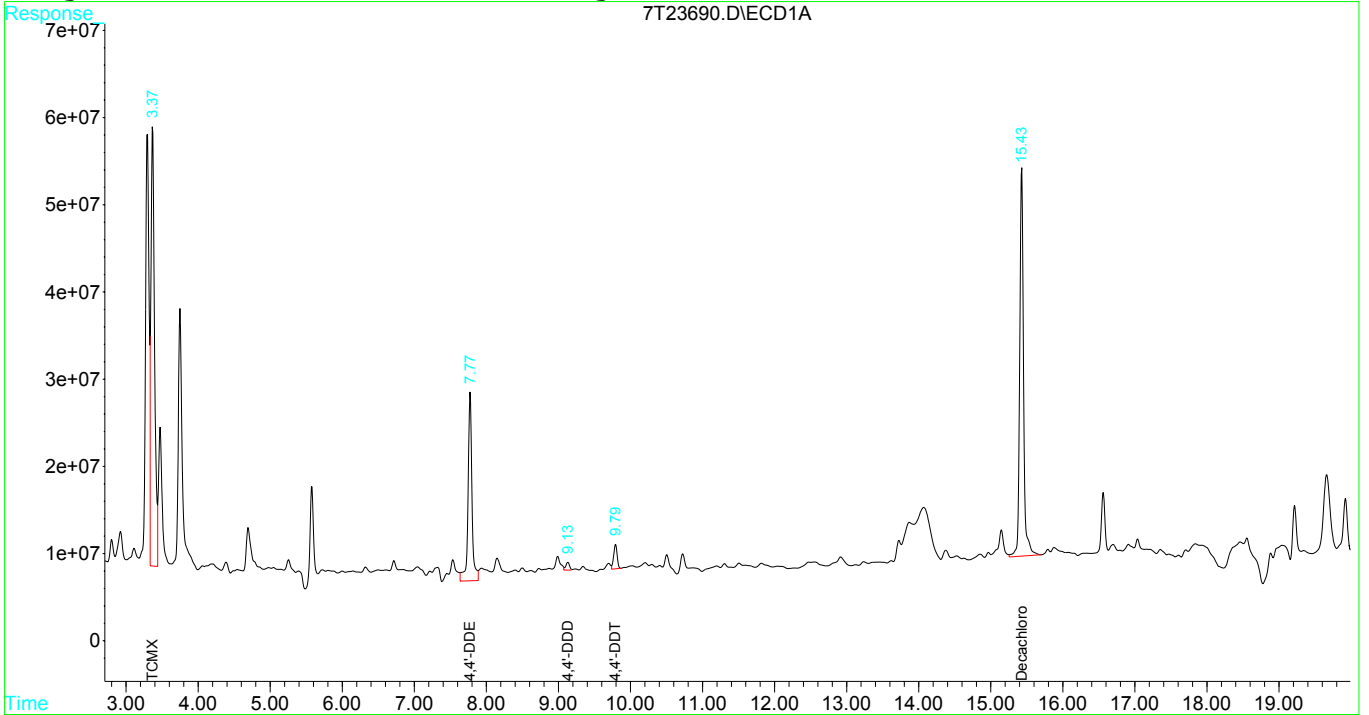
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23690.D 80810302.M Thu Mar 24 11:15:29 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23690.D\ECD1A.CH Vial: 24  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23690.D\ECD2B.CH  
Acq On : 23 Mar 2022 21:29 Operator: sdp  
Sample : 2030609-01 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:08 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.2

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-2  
**Lab Sample ID:** 2030609-02  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 09:20	Prep Date: 03/22/22 12:59	File ID: 7T23691.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/23/22 21:52
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 72.20	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000824	0.00180	U
72-55-9	4,4'-DDE	0.00426	0.000985	0.00180	
50-29-3	4,4'-DDT	ND	0.00127	0.00180	U
309-00-2	Aldrin	ND	0.000853	0.00180	U
319-84-6	alpha-BHC	ND	0.000536	0.00180	U
319-85-7	beta-BHC	ND	0.000860	0.00180	U
57-74-9	Chlordane	ND	0.000801	0.00180	U
319-86-8	delta-BHC	ND	0.000837	0.00180	U
60-57-1	Dieldrin	ND	0.000942	0.00180	U
959-98-8	Endosulfan I	ND	0.000850	0.00180	U
33213-65-9	Endosulfan II	ND	0.000819	0.00180	U
1031-07-8	Endosulfan sulfate	ND	0.000677	0.00180	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000819	0.00180	U
72-20-8	Endrin	ND	0.000622	0.00180	U
7421-93-4	Endrin aldehyde	ND	0.000717	0.00180	U
53494-70-5	Endrin ketone	ND	0.000634	0.00180	U
58-89-9	gamma-BHC (Lindane)	ND	0.000571	0.00180	U
76-44-8	Heptachlor	ND	0.000482	0.00180	U
1024-57-3	Heptachlor Epoxide	ND	0.000909	0.00180	U
72-43-5	Methoxychlor	ND	0.000528	0.00180	U
8001-35-2	Toxaphene	ND	0.0867	0.0914	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23691.D\ECD1A.CH Vial: 25  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23691.D\ECD2B.CH  
 Acq On : 23 Mar 2022 21:52 Operator: sdp  
 Sample : 2030609-02 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:09 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1749.7E6	902.3E6	49.907	56.023
Spiked Amount	50.000	Range	43 - 129	Recovery	=	99.81% 112.05%
21) S Decachlorobiphen	15.43	17.97	1654.6E6	701.1E6	49.222	51.967
Spiked Amount	50.000	Range	42 - 136	Recovery	=	98.44% 103.93%
Target Compounds						
10) 4,4'-DDE	7.77	9.90	183.5E6	93553412	4.608	5.331
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23691.D 80810302.M Thu Mar 24 11:15:30 2022 SS

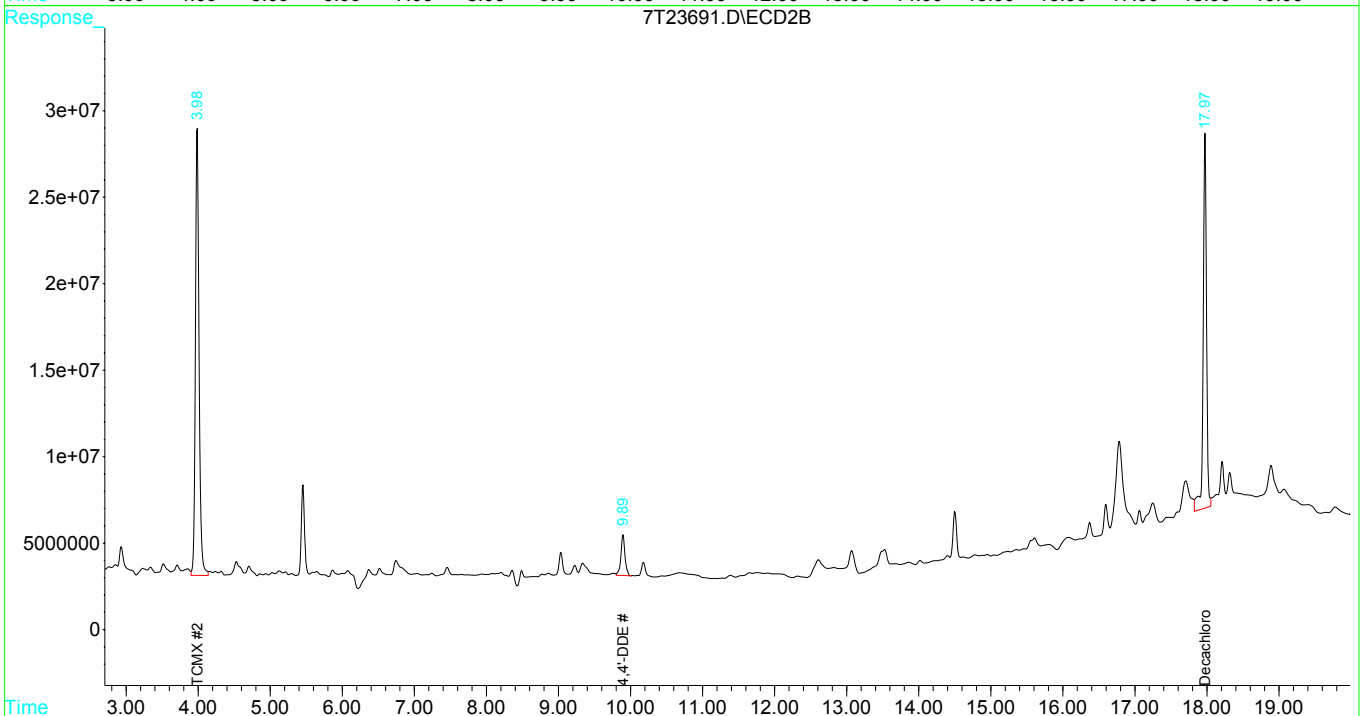
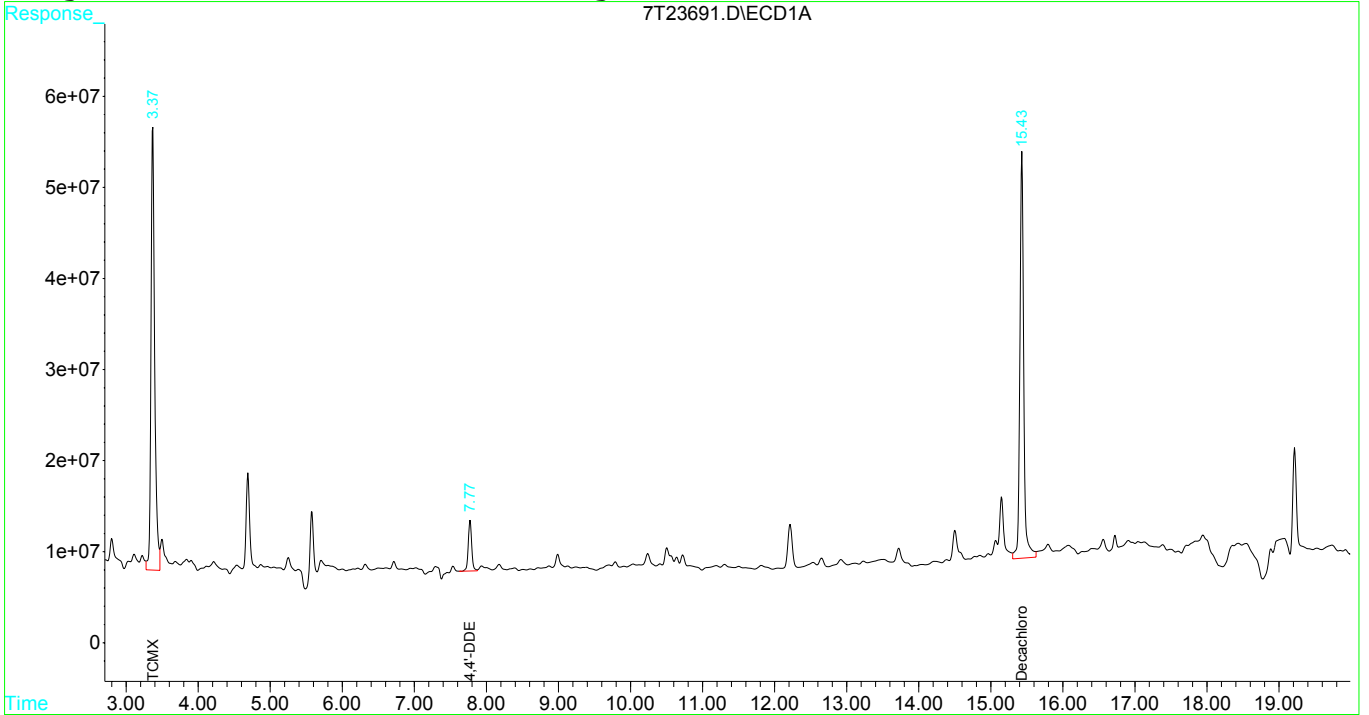


Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23691.D\ECD1A.CH Vial: 25  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23691.D\ECD2B.CH  
Acq On : 23 Mar 2022 21:52 Operator: sdp  
Sample : 2030609-02 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:09 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.2

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-3  
**Lab Sample ID:** 2030609-03  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 09:40	Prep Date: 03/22/22 12:59	File ID: 7T23692.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/23/22 22:14
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 82.09	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD [2C]	0.00137	0.000725	0.00158	J
72-55-9	4,4'-DDE	0.0169	0.000866	0.00158	
50-29-3	4,4'-DDT	0.00700	0.00112	0.00158	
309-00-2	Aldrin	ND	0.000750	0.00158	U
319-84-6	alpha-BHC	ND	0.000471	0.00158	U
319-85-7	beta-BHC	ND	0.000757	0.00158	U
57-74-9	Chlordane	ND	0.000704	0.00158	U
319-86-8	delta-BHC	ND	0.000736	0.00158	U
60-57-1	Dieldrin	ND	0.000828	0.00158	U
959-98-8	Endosulfan I	ND	0.000748	0.00158	U
33213-65-9	Endosulfan II	ND	0.000720	0.00158	U
1031-07-8	Endosulfan sulfate	ND	0.000596	0.00158	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000720	0.00158	U
72-20-8	Endrin	ND	0.000547	0.00158	U
7421-93-4	Endrin aldehyde	ND	0.000631	0.00158	U
53494-70-5	Endrin ketone	ND	0.000558	0.00158	U
58-89-9	gamma-BHC (Lindane)	ND	0.000502	0.00158	U
76-44-8	Heptachlor	ND	0.000424	0.00158	U
1024-57-3	Heptachlor Epoxide	ND	0.000799	0.00158	U
72-43-5	Methoxychlor	ND	0.000464	0.00158	U
8001-35-2	Toxaphene	ND	0.0763	0.0804	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23692.D\ECD1A.CH Vial: 26  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23692.D\ECD2B.CH  
 Acq On : 23 Mar 2022 22:14 Operator: sdp  
 Sample : 2030609-03 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:10 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1866.9E6	857.0E6	53.249	53.212
Spiked Amount	50.000	Range	43 - 129	Recovery	= 106.50%	106.42%
21) S Decachlorobiphen	15.44	17.98	1866.4E6	722.0E6	55.522	53.517
Spiked Amount	50.000	Range	42 - 136	Recovery	= 111.04%	107.03%
Target Compounds						
10) 4,4'-DDE	7.78	9.90	828.0E6	384.3E6	20.792	21.901m
13) 4,4'-DDD	9.13	11.51	100.4E6	24348111	3.170m	1.692 #
15) M 4,4'-DDT	9.79	12.55	288.5E6	126.1E6	8.619m	8.722
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

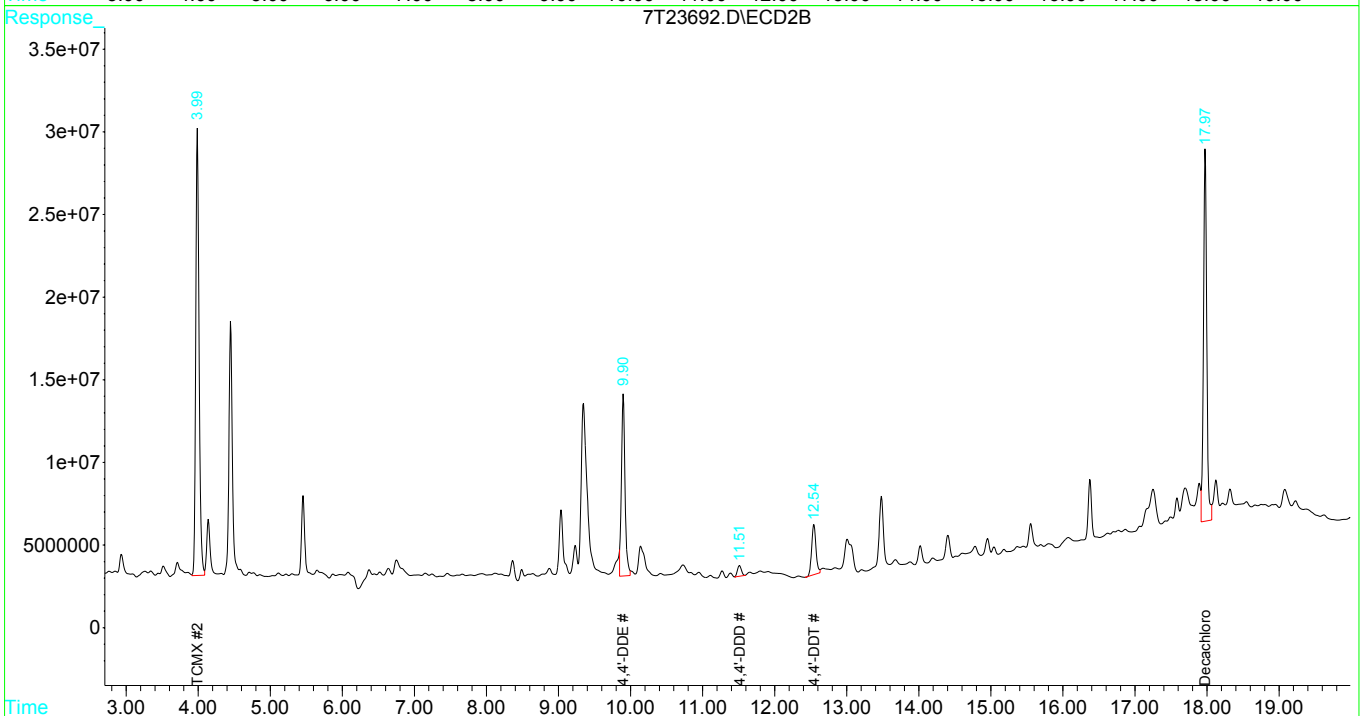
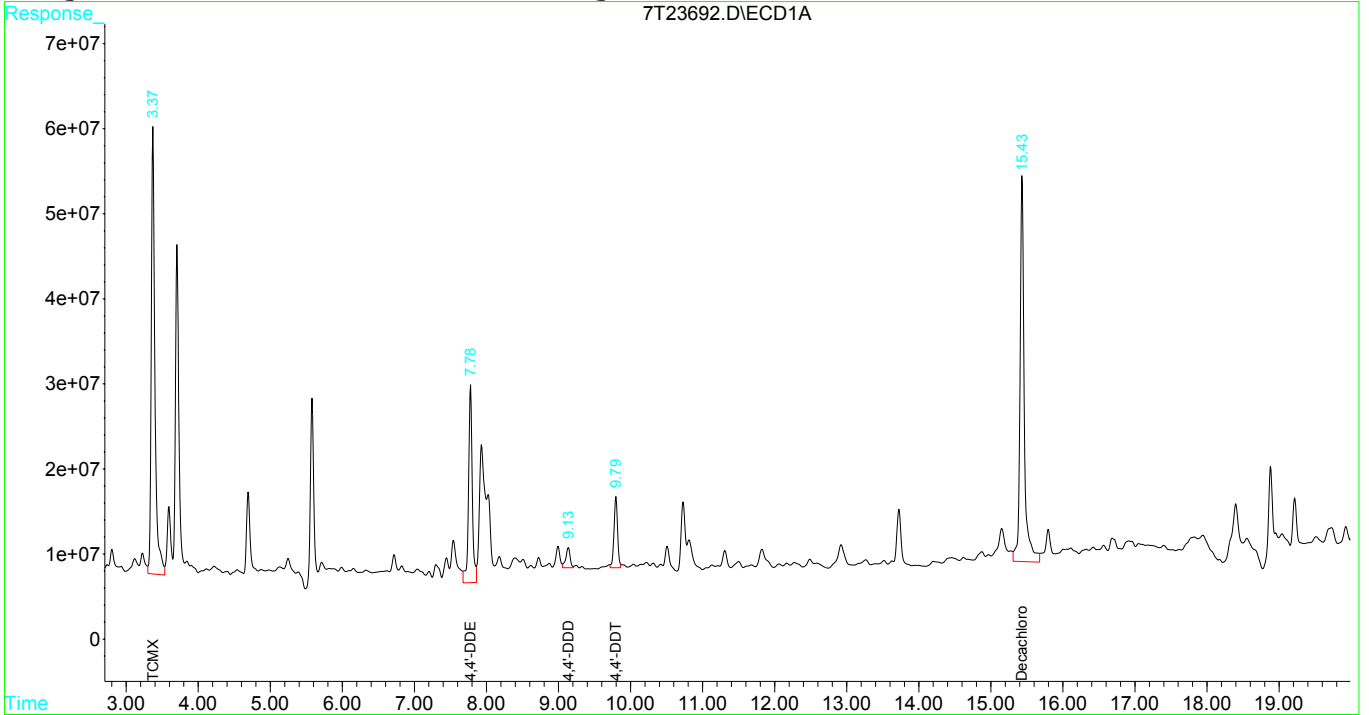
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23692.D 80810302.M Thu Mar 24 11:15:32 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23692.D\ECD1A.CH Vial: 26  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23692.D\ECD2B.CH  
Acq On : 23 Mar 2022 22:14 Operator: sdp  
Sample : 2030609-03 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:10 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **HAP-4**  
**Lab Sample ID:** **2030609-04**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Date Sampled: 03/10/22 10:15	Prep Date: 03/22/22 12:59	File ID: 7T23693.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/23/22 22:36
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 73.29	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000812	0.00177	U
72-55-9	4,4'-DDE	0.00373	0.000970	0.00177	
50-29-3	4,4'-DDT	ND	0.00125	0.00177	U
309-00-2	Aldrin	ND	0.000840	0.00177	U
319-84-6	alpha-BHC	ND	0.000528	0.00177	U
319-85-7	beta-BHC	ND	0.000847	0.00177	U
57-74-9	Chlordane	ND	0.000789	0.00177	U
319-86-8	delta-BHC	ND	0.000824	0.00177	U
60-57-1	Dieldrin	ND	0.000928	0.00177	U
959-98-8	Endosulfan I	ND	0.000838	0.00177	U
33213-65-9	Endosulfan II	ND	0.000806	0.00177	U
1031-07-8	Endosulfan sulfate	ND	0.000667	0.00177	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000806	0.00177	U
72-20-8	Endrin	ND	0.000613	0.00177	U
7421-93-4	Endrin aldehyde	ND	0.000707	0.00177	U
53494-70-5	Endrin ketone	ND	0.000625	0.00177	U
58-89-9	gamma-BHC (Lindane)	ND	0.000562	0.00177	U
76-44-8	Heptachlor	ND	0.000475	0.00177	U
1024-57-3	Heptachlor Epoxide	ND	0.000895	0.00177	U
72-43-5	Methoxychlor	ND	0.000520	0.00177	U
8001-35-2	Toxaphene	ND	0.0854	0.0901	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I



Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23693.D\ECD1A.CH Vial: 27  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23693.D\ECD2B.CH  
 Acq On : 23 Mar 2022 22:36 Operator: sdp  
 Sample : 2030609-04 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:10 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1615.8E6	866.0E6	46.086	53.769
Spiked Amount	50.000	Range	43 - 129	Recovery =	92.17%	107.54%
21) S Decachlorobiphen	15.43	17.97	1418.1E6	574.7E6	42.185	42.601m
Spiked Amount	50.000	Range	42 - 136	Recovery =	84.37%	85.20%
Target Compounds						
10) 4,4'-DDE	7.77	9.90	163.2E6	78551859	4.099m	4.476
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

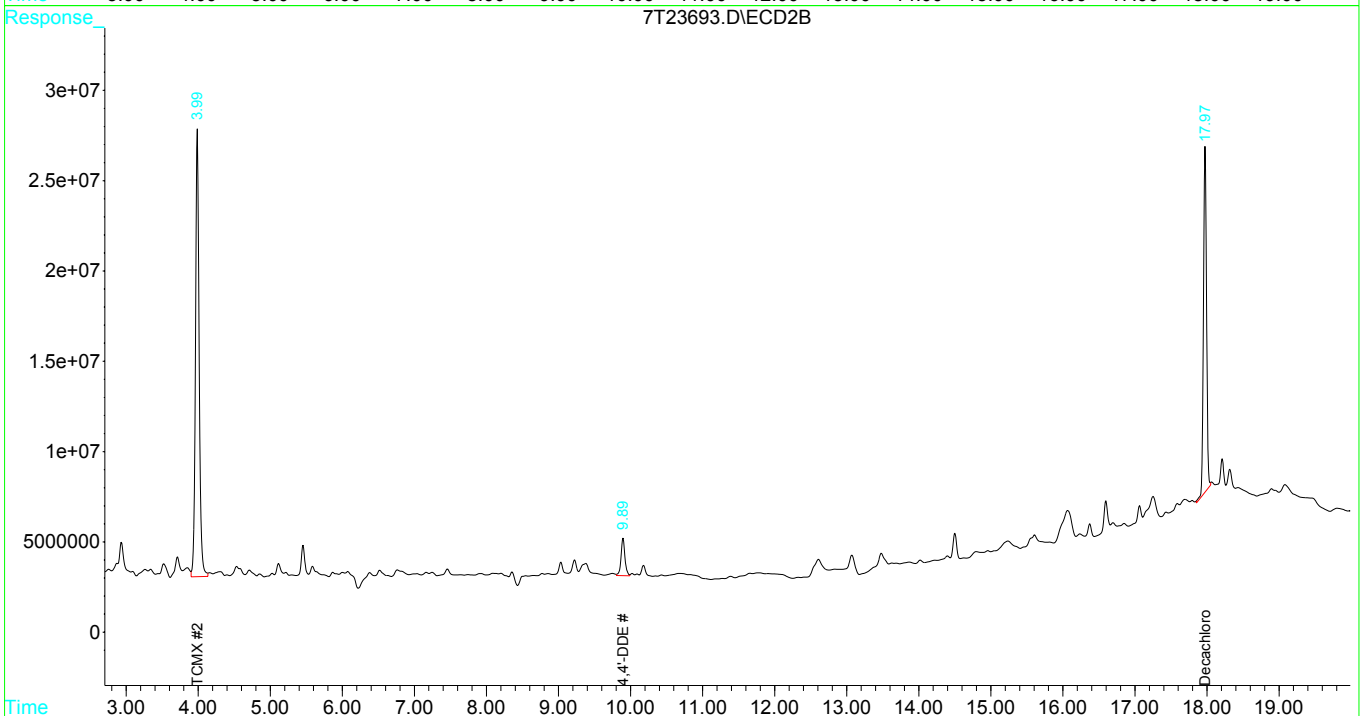
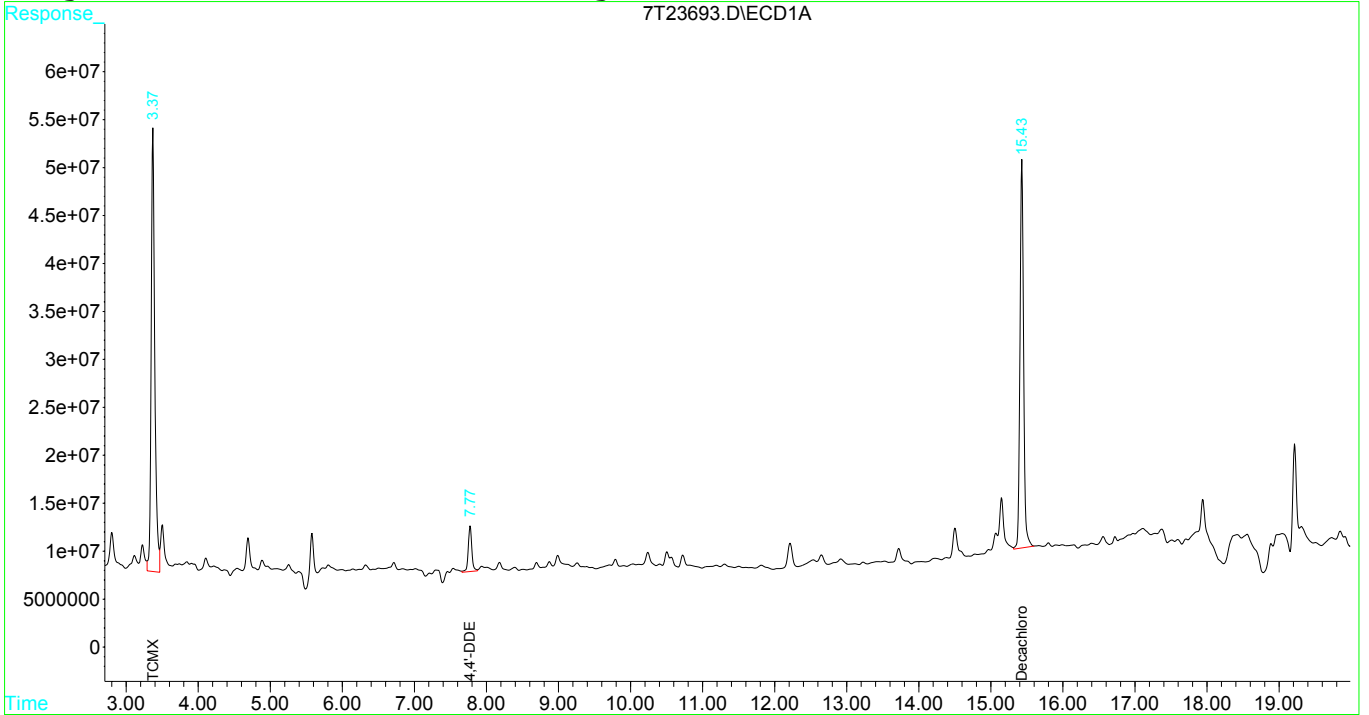
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23693.D 80810302.M Thu Mar 24 11:15:33 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23693.D\ECD1A.CH Vial: 27  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23693.D\ECD2B.CH  
Acq On : 23 Mar 2022 22:36 Operator: sdp  
Sample : 2030609-04 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:10 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.2.

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-5  
**Lab Sample ID:** 2030609-05  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 10:30	Prep Date: 03/22/22 12:59	File ID: 7T23694.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/23/22 22:58
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 67.13	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD [2C]	0.000953	0.000886	0.00194	J
72-55-9	4,4'-DDE [2C]	0.0425	0.00106	0.00194	
50-29-3	4,4'-DDT	0.00585	0.00137	0.00194	
309-00-2	Aldrin	ND	0.000918	0.00194	U
319-84-6	alpha-BHC	ND	0.000577	0.00194	U
319-85-7	beta-BHC	ND	0.000925	0.00194	U
57-74-9	Chlordane	ND	0.000861	0.00194	U
319-86-8	delta-BHC	ND	0.000900	0.00194	U
60-57-1	Dieldrin	ND	0.00101	0.00194	U
959-98-8	Endosulfan I	ND	0.000915	0.00194	U
33213-65-9	Endosulfan II	ND	0.000880	0.00194	U
1031-07-8	Endosulfan sulfate	ND	0.000728	0.00194	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000880	0.00194	U
72-20-8	Endrin	ND	0.000669	0.00194	U
7421-93-4	Endrin aldehyde	ND	0.000772	0.00194	U
53494-70-5	Endrin ketone	ND	0.000682	0.00194	U
58-89-9	gamma-BHC (Lindane)	ND	0.000614	0.00194	U
76-44-8	Heptachlor	ND	0.000518	0.00194	U
1024-57-3	Heptachlor Epoxide	ND	0.000977	0.00194	U
72-43-5	Methoxychlor	ND	0.000568	0.00194	U
8001-35-2	Toxaphene	ND	0.0933	0.0983	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23694.D\ECD1A.CH Vial: 28  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23694.D\ECD2B.CH  
 Acq On : 23 Mar 2022 22:58 Operator: sdp  
 Sample : 2030609-05 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:11 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.37	3.99	2089.6E6	986.9E6	59.602	61.277
Spiked Amount	50.000	Range	43 - 129	Recovery	= 119.20%	122.55%
21) S Decachlorobiphen	15.43	17.97	1695.2E6	718.3E6	50.428m	53.240m
Spiked Amount	50.000	Range	42 - 136	Recovery	= 100.86%	106.48%
Target Compounds						
10) 4,4'-DDE	7.78	9.90	1804.3E6	751.3E6	45.306	42.812
13) 4,4'-DDD	9.13	11.51	34780019	13779265	1.098m	0.957
15) M 4,4'-DDT	9.79	12.54	197.1E6	101.0E6	5.889m	6.985
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

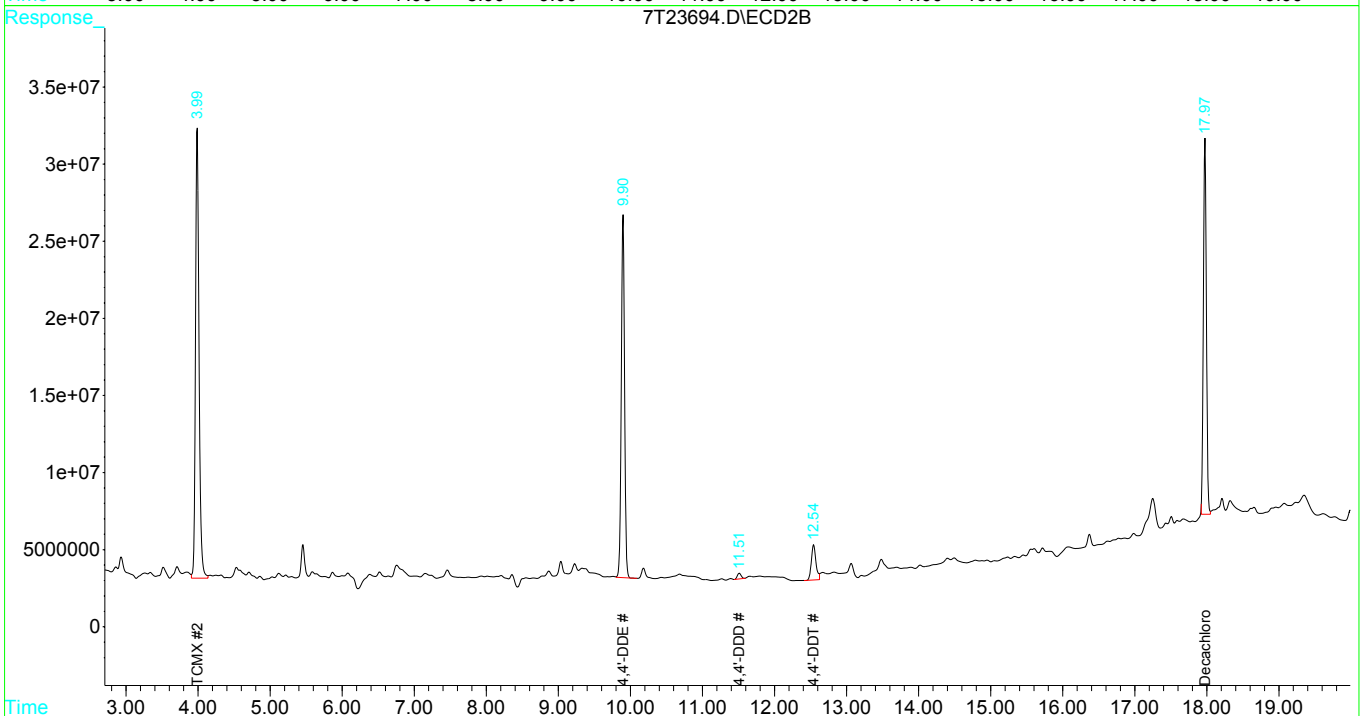
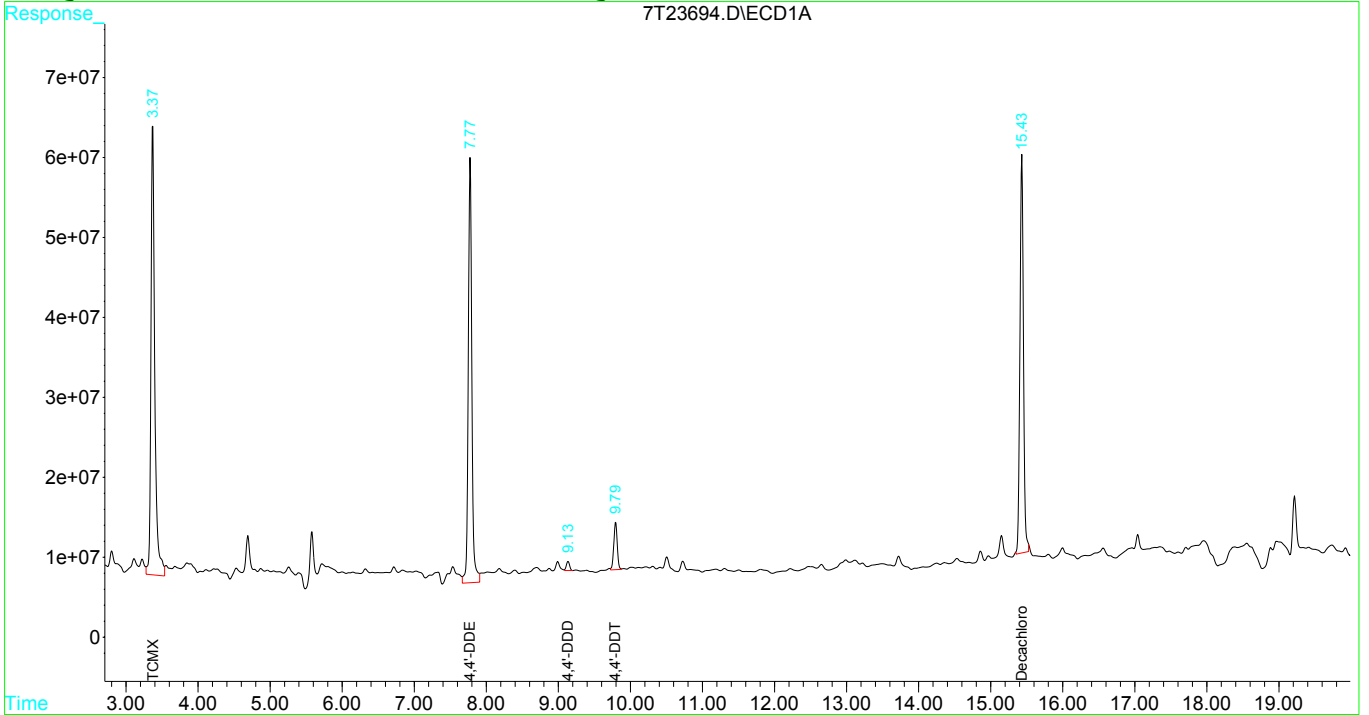
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23694.D 80810302.M Thu Mar 24 11:15:35 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23694.D\ECD1A.CH Vial: 28  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23694.D\ECD2B.CH  
Acq On : 23 Mar 2022 22:58 Operator: sdp  
Sample : 2030609-05 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:11 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.2.



# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **HAP-6**  
**Lab Sample ID:** **2030609-06**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Date Sampled: 03/10/22 11:00	Prep Date: 03/22/22 12:59	File ID: 7T23695.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/23/22 23:21
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 76.55	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000777	0.00170	U
72-55-9	4,4'-DDE	ND	0.000929	0.00170	U
50-29-3	4,4'-DDT	ND	0.00120	0.00170	U
309-00-2	Aldrin	ND	0.000805	0.00170	U
319-84-6	alpha-BHC	ND	0.000506	0.00170	U
319-85-7	beta-BHC	ND	0.000811	0.00170	U
57-74-9	Chlordane	ND	0.000755	0.00170	U
319-86-8	delta-BHC	ND	0.000789	0.00170	U
60-57-1	Dieldrin	ND	0.000888	0.00170	U
959-98-8	Endosulfan I	ND	0.000802	0.00170	U
33213-65-9	Endosulfan II	ND	0.000772	0.00170	U
1031-07-8	Endosulfan sulfate	ND	0.000639	0.00170	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000772	0.00170	U
72-20-8	Endrin	ND	0.000587	0.00170	U
7421-93-4	Endrin aldehyde	ND	0.000677	0.00170	U
53494-70-5	Endrin ketone	ND	0.000598	0.00170	U
58-89-9	gamma-BHC (Lindane)	ND	0.000538	0.00170	U
76-44-8	Heptachlor	ND	0.000455	0.00170	U
1024-57-3	Heptachlor Epoxide	ND	0.000857	0.00170	U
72-43-5	Methoxychlor	ND	0.000498	0.00170	U
8001-35-2	Toxaphene	ND	0.0818	0.0862	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23695.D\ECD1A.CH Vial: 29  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23695.D\ECD2B.CH  
 Acq On : 23 Mar 2022 23:21 Operator: sdp  
 Sample : 2030609-06 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:12 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1698.1E6	898.9E6	48.433	55.814
Spiked Amount	50.000	Range	43 - 129	Recovery =	96.87%	111.63%
21) S Decachlorobiphen	15.43	17.97	1552.7E6	641.4E6	46.191m	47.543m
Spiked Amount	50.000	Range	42 - 136	Recovery =	92.38%	95.09%
Target Compounds						
10) 4,4'-DDE	7.77	9.89	24630201	14714174	0.618m	0.839m#
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

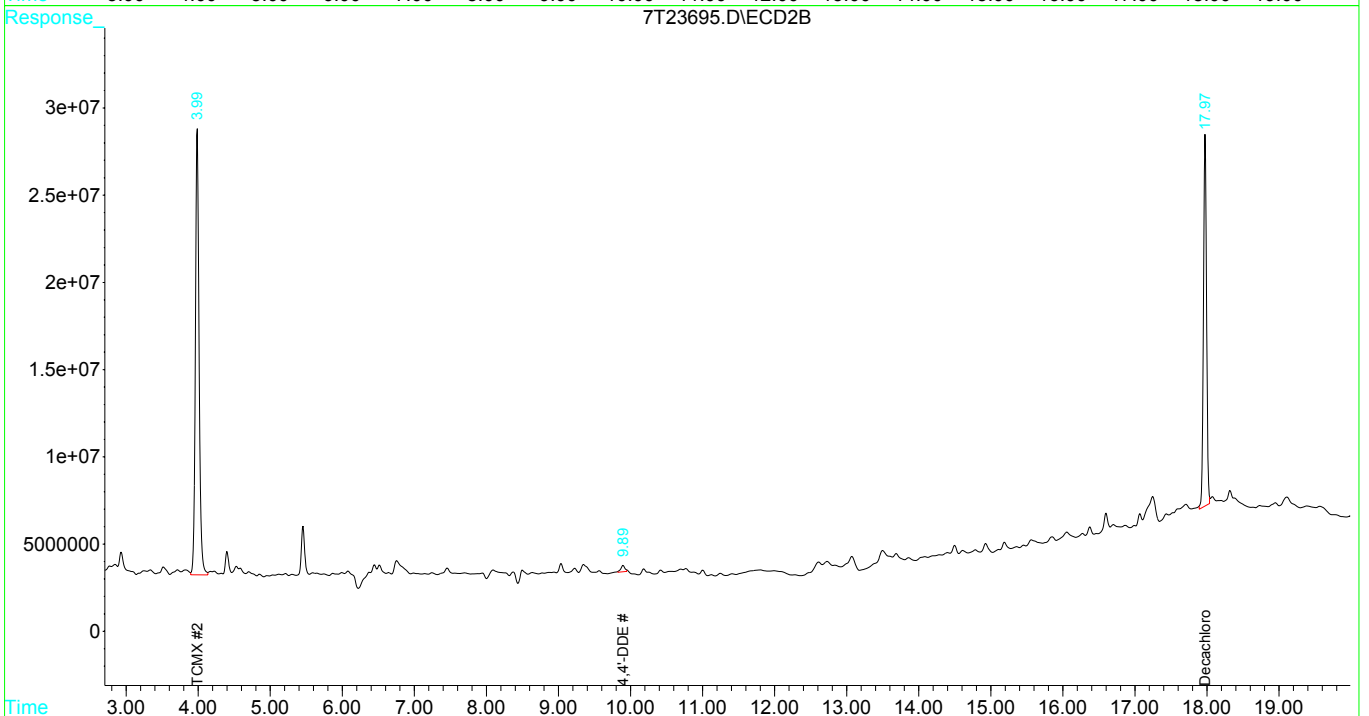
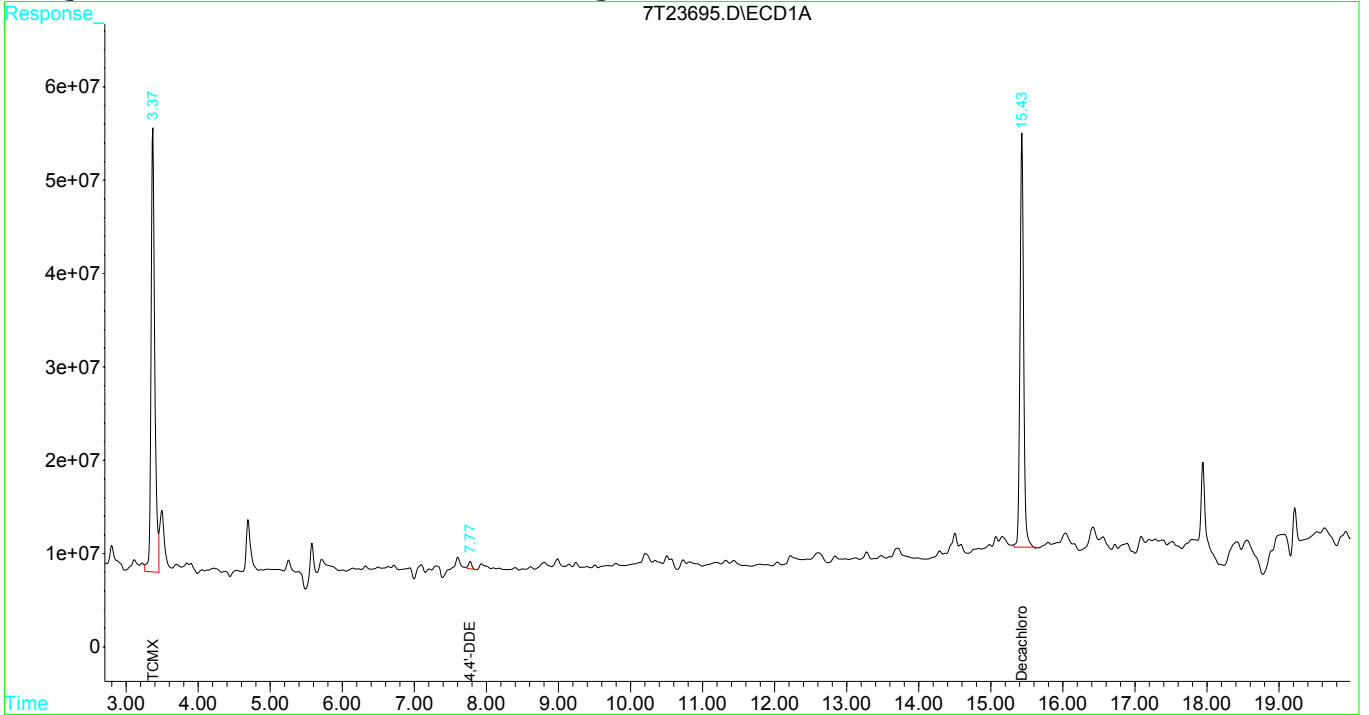
-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23695.D 80810302.M Thu Mar 24 11:15:37 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23695.D\ECD1A.CH Vial: 29  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23695.D\ECD2B.CH  
Acq On : 23 Mar 2022 23:21 Operator: sdp  
Sample : 2030609-06 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:12 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.2

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-7  
**Lab Sample ID:** 2030609-07  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 11:20	Prep Date: 03/22/22 12:59	File ID: 7T23696.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/23/22 23:43
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 67.75	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD [2C]	ND	0.000878	0.00192	U
72-55-9	4,4'-DDE	0.00702	0.00105	0.00192	
50-29-3	4,4'-DDT	0.00321	0.00136	0.00192	
309-00-2	Aldrin	ND	0.000909	0.00192	U
319-84-6	alpha-BHC	ND	0.000571	0.00192	U
319-85-7	beta-BHC	ND	0.000917	0.00192	U
57-74-9	Chlordane	ND	0.000853	0.00192	U
319-86-8	delta-BHC	ND	0.000892	0.00192	U
60-57-1	Dieldrin	ND	0.00100	0.00192	U
959-98-8	Endosulfan I	ND	0.000906	0.00192	U
33213-65-9	Endosulfan II	ND	0.000872	0.00192	U
1031-07-8	Endosulfan sulfate	ND	0.000722	0.00192	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000872	0.00192	U
72-20-8	Endrin	ND	0.000663	0.00192	U
7421-93-4	Endrin aldehyde	ND	0.000765	0.00192	U
53494-70-5	Endrin ketone	ND	0.000676	0.00192	U
58-89-9	gamma-BHC (Lindane)	ND	0.000608	0.00192	U
76-44-8	Heptachlor	ND	0.000514	0.00192	U
1024-57-3	Heptachlor Epoxide	ND	0.000968	0.00192	U
72-43-5	Methoxychlor	ND	0.000562	0.00192	U
8001-35-2	Toxaphene	ND	0.0924	0.0974	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23696.D\ECD1A.CH Vial: 30  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23696.D\ECD2B.CH  
 Acq On : 23 Mar 2022 23:43 Operator: sdp  
 Sample : 2030609-07 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:13 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.37	3.99	2052.1E6	924.0E6	58.531	57.371
Spiked Amount	50.000	Range	43 - 129	Recovery	= 117.06%	114.74%
21) S Decachlorobiphen	15.43	17.97	1597.8E6	710.9E6	47.531m	52.694m
Spiked Amount	50.000	Range	42 - 136	Recovery	= 95.06%	105.39%
Target Compounds						
10) 4,4'-DDE	7.78	9.90	283.9E6	151.5E6	7.129	8.635
13) 4,4'-DDD	9.14	11.51	37240328	9618674	1.175	0.668 #
15) M 4,4'-DDT	9.80	12.55	109.0E6	51229594	3.256	3.544
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

-----  
 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23696.D 80810302.M Thu Mar 24 11:15:38 2022 SS

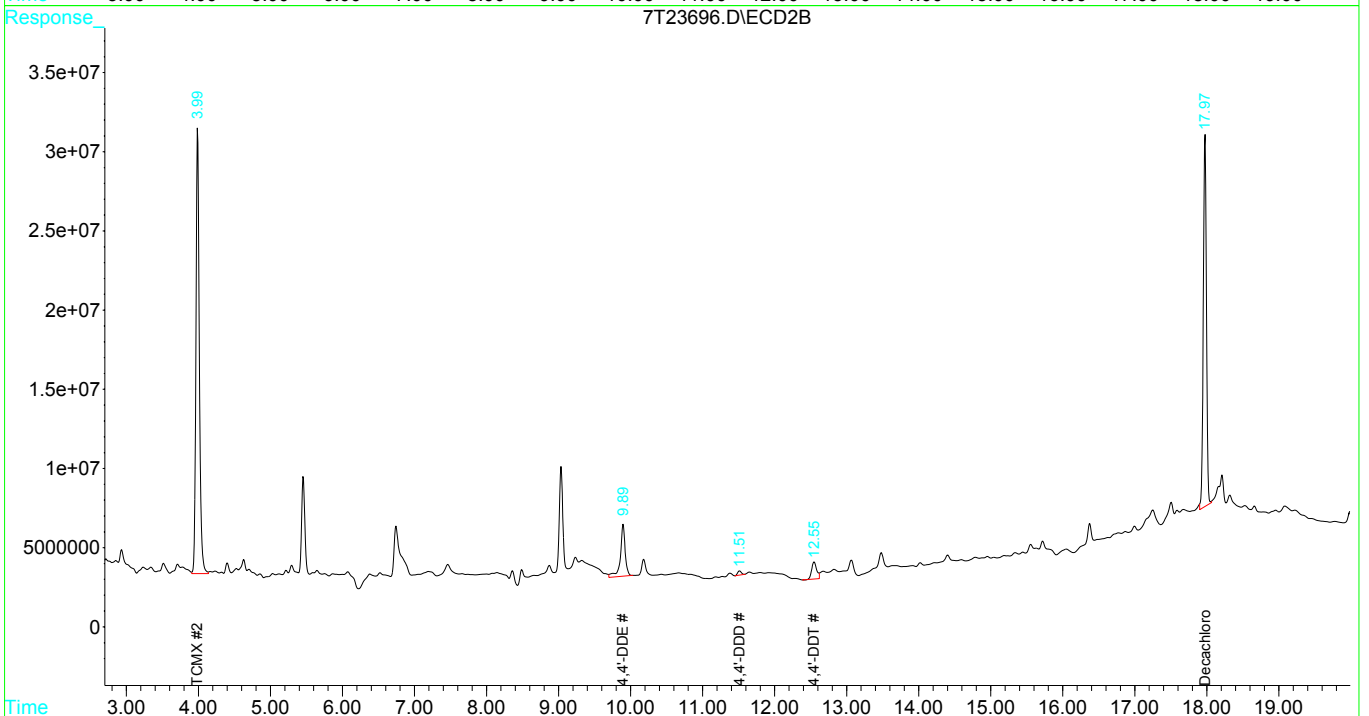
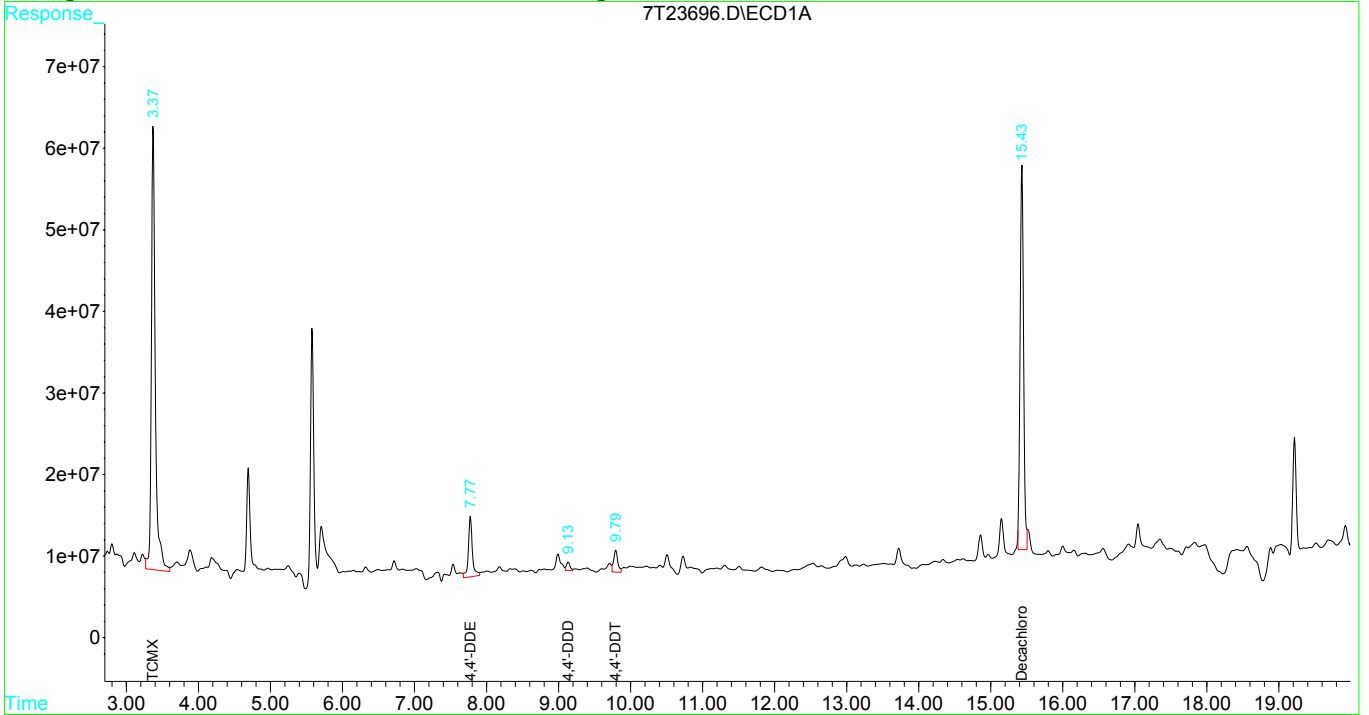


Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23696.D\ECD1A.CH Vial: 30  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23696.D\ECD2B.CH  
Acq On : 23 Mar 2022 23:43 Operator: sdp  
Sample : 2030609-07 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:13 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.2.

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **HAP-8**  
**Lab Sample ID:** **2030609-08**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Date Sampled: 03/10/22 11:45	Prep Date: 03/22/22 12:59	File ID: 7T23697.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/24/22 00:05
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 78.78	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000755	0.00165	U
72-55-9	4,4'-DDE	0.00288	0.000903	0.00165	
50-29-3	4,4'-DDT [2C]	0.00277	0.00117	0.00165	
309-00-2	Aldrin	ND	0.000782	0.00165	U
319-84-6	alpha-BHC	ND	0.000491	0.00165	U
319-85-7	beta-BHC	ND	0.000788	0.00165	U
57-74-9	Chlordane	ND	0.000734	0.00165	U
319-86-8	delta-BHC	ND	0.000767	0.00165	U
60-57-1	Dieldrin	ND	0.000863	0.00165	U
959-98-8	Endosulfan I	ND	0.000779	0.00165	U
33213-65-9	Endosulfan II	ND	0.000750	0.00165	U
1031-07-8	Endosulfan sulfate	ND	0.000621	0.00165	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000750	0.00165	U
72-20-8	Endrin	ND	0.000570	0.00165	U
7421-93-4	Endrin aldehyde	ND	0.000658	0.00165	U
53494-70-5	Endrin ketone	ND	0.000581	0.00165	U
58-89-9	gamma-BHC (Lindane)	ND	0.000523	0.00165	U
76-44-8	Heptachlor	ND	0.000442	0.00165	U
1024-57-3	Heptachlor Epoxide	ND	0.000833	0.00165	U
72-43-5	Methoxychlor	ND	0.000484	0.00165	U
8001-35-2	Toxaphene	ND	0.0795	0.0838	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23697.D\ECD1A.CH Vial: 31  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23697.D\ECD2B.CH  
 Acq On : 24 Mar 2022 00:05 Operator: sdp  
 Sample : 2030609-08 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:14 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
-----						
System Monitoring Compounds						
1) S TCMX	3.38	4.00	1671.0E6	824.5E6	47.662	51.189
Spiked Amount	50.000	Range	43 - 129	Recovery	= 95.32%	102.38%
21) S Decachlorobiphen	15.44	17.97	1856.1E6	667.8E6	55.216	49.504m
Spiked Amount	50.000	Range	42 - 136	Recovery	= 110.43%	99.01%
Target Compounds						
10) 4,4'-DDE	7.78	9.90	135.3E6	85055491	3.397	4.847 #
13) 4,4'-DDD	9.14	11.52	23466472	13686829	0.741	0.951m#
15) M 4,4'-DDT	9.80	12.55	126.0E6	47223122	3.764	3.266
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

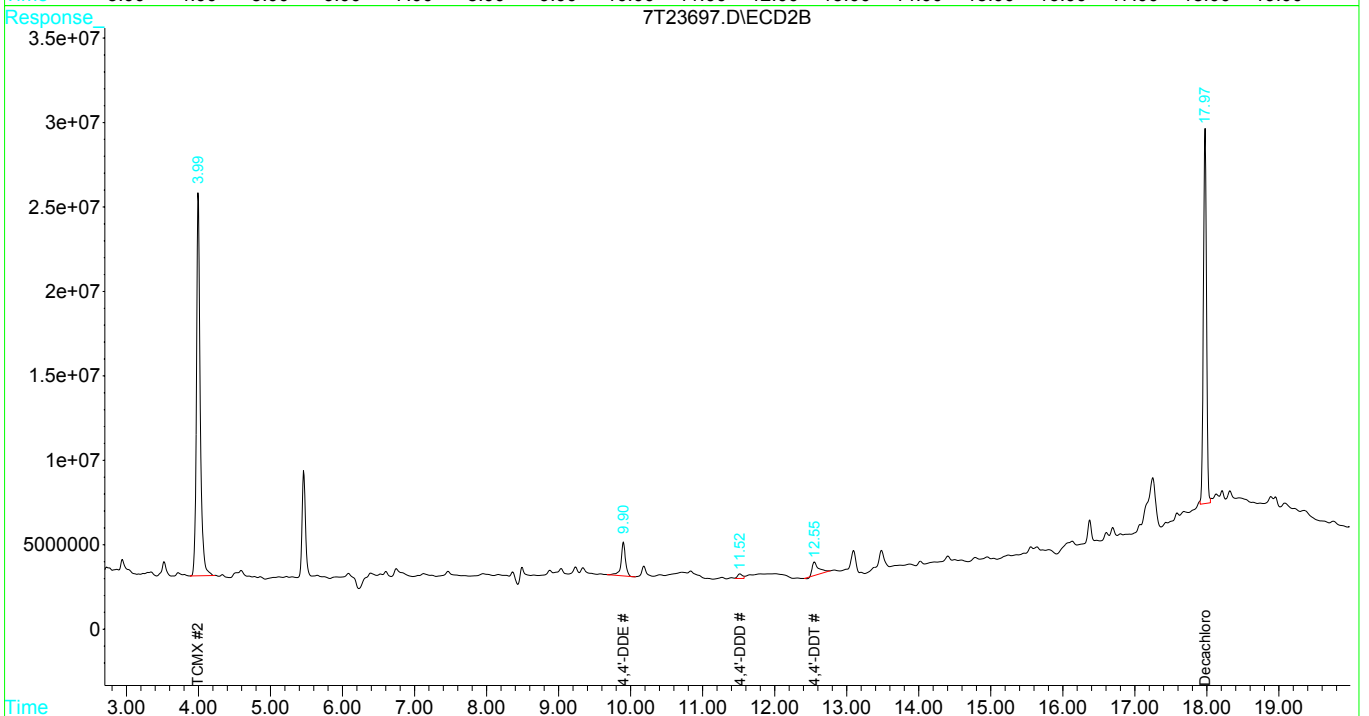
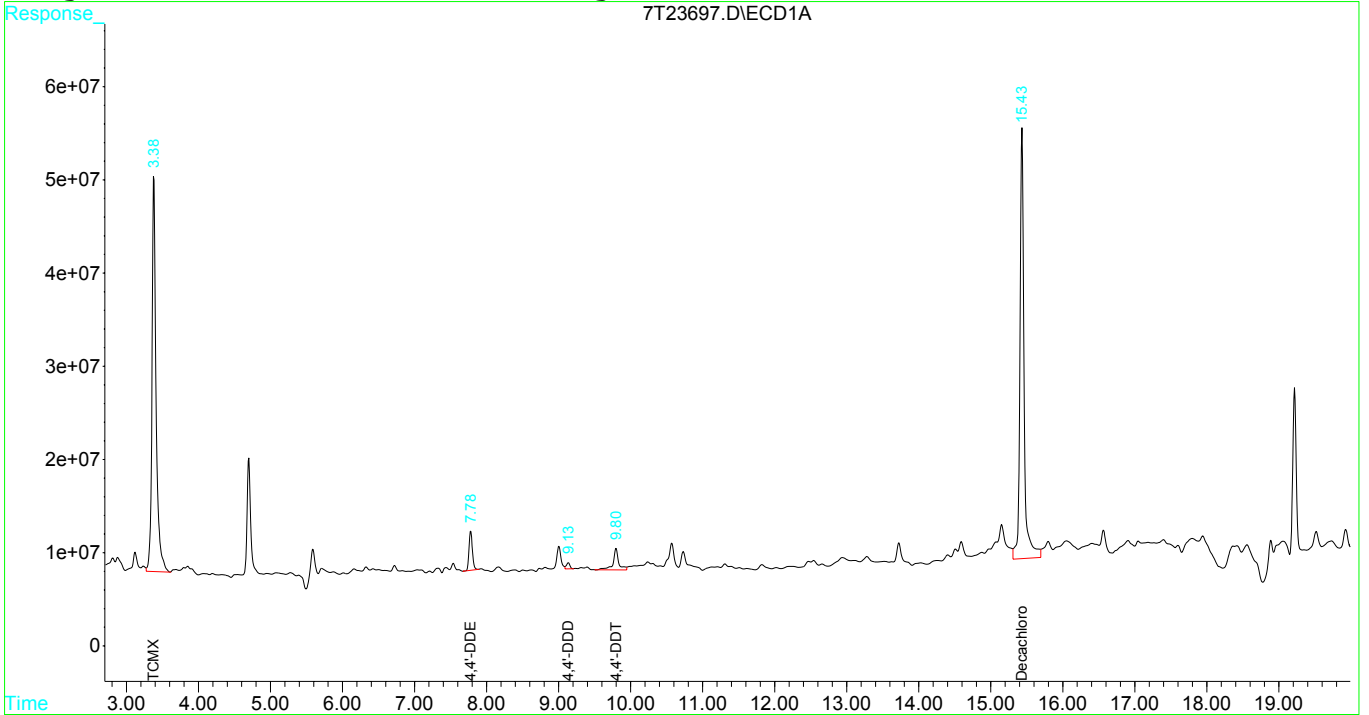
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 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23697.D 80810302.M Thu Mar 24 11:15:40 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23697.D\ECD1A.CH Vial: 31  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23697.D\ECD2B.CH  
 Acq On : 24 Mar 2022 00:05 Operator: sdp  
 Sample : 2030609-08 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:14 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Multiple Level Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



10  
10.2

# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** Sesi Consulting Engineers  
**Client Sample ID:** HAP-9  
**Lab Sample ID:** 2030609-09  
**Project:** 2300 Catherine St.  
**Work Order:** 2030609

Date Sampled: 03/10/22 12:05	Prep Date: 03/22/22 12:59	File ID: 7T23698.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2230	Analyzed: 03/24/22 00:27
Dilution: 1	Matrix: Soil	Sequence: S2C2514
Percent Solids: 79.87	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD [2C]	0.00190	0.000745	0.00163	
72-55-9	4,4'-DDE	0.0372	0.000890	0.00163	
50-29-3	4,4'-DDT [2C]	0.0121	0.00115	0.00163	
309-00-2	Aldrin	ND	0.000771	0.00163	U
319-84-6	alpha-BHC	ND	0.000485	0.00163	U
319-85-7	beta-BHC	ND	0.000778	0.00163	U
57-74-9	Chlordane	ND	0.000724	0.00163	U
319-86-8	delta-BHC	ND	0.000756	0.00163	U
60-57-1	Dieldrin	ND	0.000851	0.00163	U
959-98-8	Endosulfan I	ND	0.000769	0.00163	U
33213-65-9	Endosulfan II	ND	0.000740	0.00163	U
1031-07-8	Endosulfan sulfate	ND	0.000612	0.00163	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000740	0.00163	U
72-20-8	Endrin	ND	0.000562	0.00163	U
7421-93-4	Endrin aldehyde	ND	0.000649	0.00163	U
53494-70-5	Endrin ketone	ND	0.000573	0.00163	U
58-89-9	gamma-BHC (Lindane)	ND	0.000516	0.00163	U
76-44-8	Heptachlor	ND	0.000436	0.00163	U
1024-57-3	Heptachlor Epoxide	ND	0.000821	0.00163	U
72-43-5	Methoxychlor	ND	0.000477	0.00163	U
8001-35-2	Toxaphene	ND	0.0784	0.0826	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I



Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23698.D\ECD1A.CH Vial: 32  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23698.D\ECD2B.CH  
 Acq On : 24 Mar 2022 00:27 Operator: sdp  
 Sample : 2030609-09 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 11:07 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1711.1E6	823.4E6	48.807	51.127
Spiked Amount	50.000	Range	43 - 129	Recovery =	97.61%	102.25%
21) S Decachlorobiphen	15.43	17.97	1418.9E6	593.6E6	42.210m	43.997m
Spiked Amount	50.000	Range	42 - 136	Recovery =	84.42%	87.99%
Target Compounds						
10) 4,4'-DDE	7.78	9.90	1774.9E6	805.9E6	44.567	45.924
13) 4,4'-DDD	9.14	11.51	96914041	32787289	3.059	2.278 #
15) M 4,4'-DDT	9.80	12.54	543.7E6	209.6E6	16.242	14.495
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

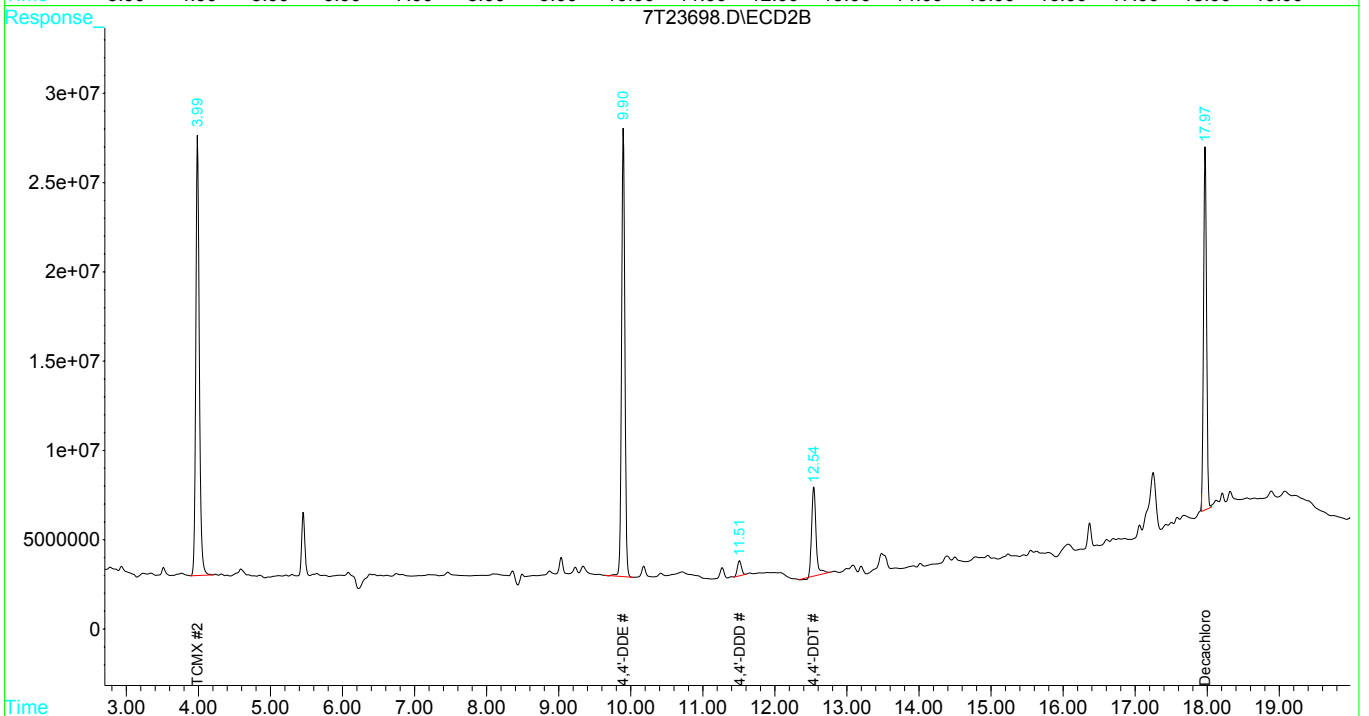
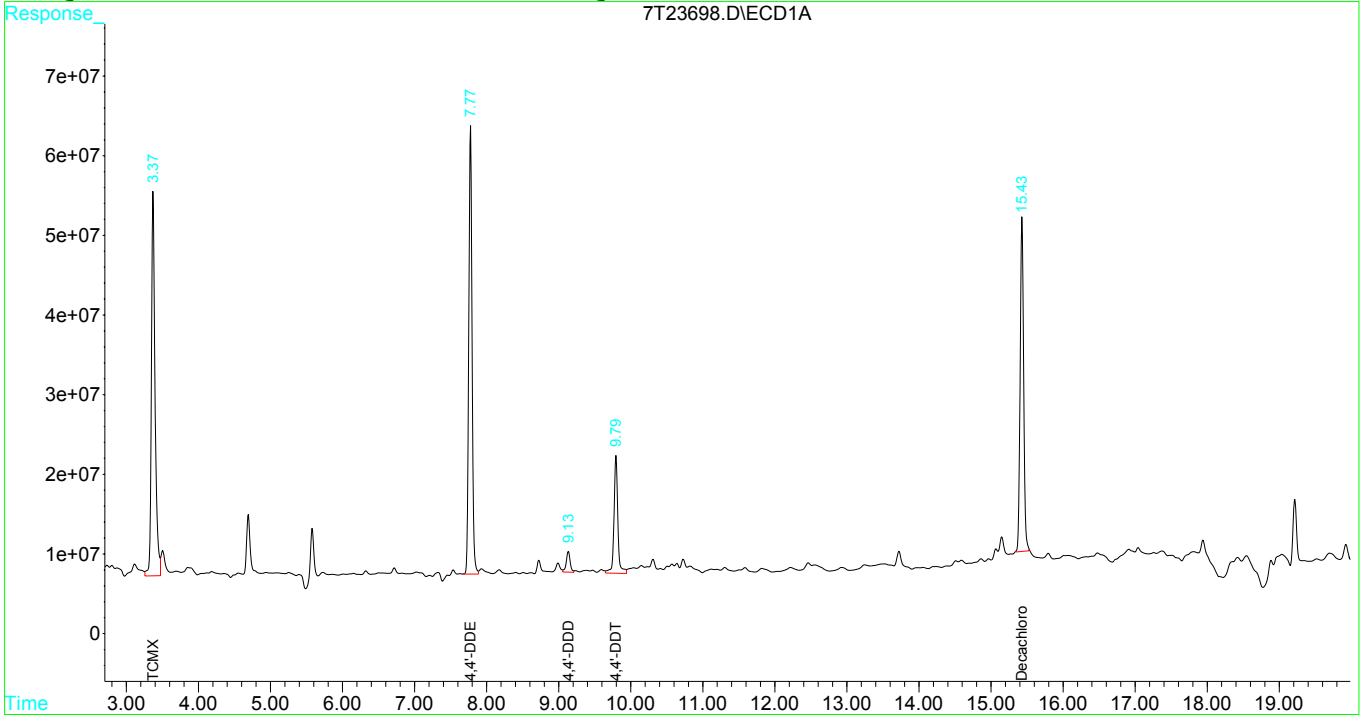
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 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23698.D 80810302.M Thu Mar 24 11:15:41 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23698.D\ECD1A.CH Vial: 32  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23698.D\ECD2B.CH  
Acq On : 24 Mar 2022 00:27 Operator: sdp  
Sample : 2030609-09 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 11:07 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# ANALYSIS DATA SHEET

Pesticides - SW 846 8081B

**Client:** **Sesi Consulting Engineers**  
**Client Sample ID:** **HAP-10**  
**Lab Sample ID:** **2030609-10**  
**Project:** **2300 Catherine St.**  
**Work Order:** **2030609**

Date Sampled: 03/10/22 12:30	Prep Date: 03/24/22 08:00	File ID: 7T23716.D
Init/Final Vol: 15 g / 10 mL	Prep Batch: B2C2339	Analyzed: 03/24/22 16:30
Dilution: 1	Matrix: Soil	Sequence: S2C2507
Percent Solids: 71.31	Prep Method: Sonication GC	

CAS NO.	COMPOUND	CONC. (mg/kg dry)	MDL	RL	Qual
72-54-8	4,4'-DDD	ND	0.000834	0.00182	U
72-55-9	4,4'-DDE	0.00564	0.000997	0.00182	
50-29-3	4,4'-DDT	0.00220	0.00129	0.00182	
309-00-2	Aldrin	ND	0.000864	0.00182	U
319-84-6	alpha-BHC	ND	0.000543	0.00182	U
319-85-7	beta-BHC	ND	0.000871	0.00182	U
57-74-9	Chlordane	ND	0.000811	0.00182	U
319-86-8	delta-BHC	ND	0.000847	0.00182	U
60-57-1	Dieldrin	ND	0.000954	0.00182	U
959-98-8	Endosulfan I	ND	0.000861	0.00182	U
33213-65-9	Endosulfan II	ND	0.000829	0.00182	U
1031-07-8	Endosulfan sulfate	ND	0.000686	0.00182	U
115-29-7	Endosulfans, Total (alpha and beta)	ND	0.000829	0.00182	U
72-20-8	Endrin	ND	0.000630	0.00182	U
7421-93-4	Endrin aldehyde	ND	0.000726	0.00182	U
53494-70-5	Endrin ketone	ND	0.000642	0.00182	U
58-89-9	gamma-BHC (Lindane)	ND	0.000578	0.00182	U
76-44-8	Heptachlor	ND	0.000488	0.00182	U
1024-57-3	Heptachlor Epoxide	ND	0.000920	0.00182	U
72-43-5	Methoxychlor	ND	0.000534	0.00182	U
8001-35-2	Toxaphene	ND	0.0878	0.0926	U

10  
10.2.

**ND, U** - Indicates compound analyzed for but not detected  
**J** - Indicates estimated value  
**B** - Indicates compound found in associated blank  
**E** - Concentration exceeds highest calibration standard

**D** - Indicates result is based on a dilution  
**H** - Indicates a Hold Time violation  
**P** - Greater than 25% diff. between 2 GC columns.  
**MDL** - Minimum detection limit, **RL** - Reporting limit

F-I

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220324\7T23716.D\ECD1A.CH Vial: 13  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220324\7T23716.D\ECD2B.CH  
 Acq On : 24 Mar 2022 16:30 Operator: sdp  
 Sample : 2030609-10 Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 18:11 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.38	4.00	1791.5E6	839.8E6	51.099	52.142
Spiked Amount	50.000	Range	43 - 129	Recovery	= 102.20%	104.28%
21) S Decachlorobiphen	15.44	17.98	1733.6E6	669.5E6	51.570	49.625m
Spiked Amount	50.000	Range	42 - 136	Recovery	= 103.14%	99.25%
Target Compounds						
10) 4,4'-DDE	7.78	9.91	240.0E6	136.6E6	6.026m	7.781 #
15) M 4,4'-DDT	9.80	12.56	78780315	56124086	2.354m	3.882 #
Sum Chlordane (gamma)			0	0	N.D.	N.D.
Average Chlordane (gamma)					0.000	0.000
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

10  
10.2

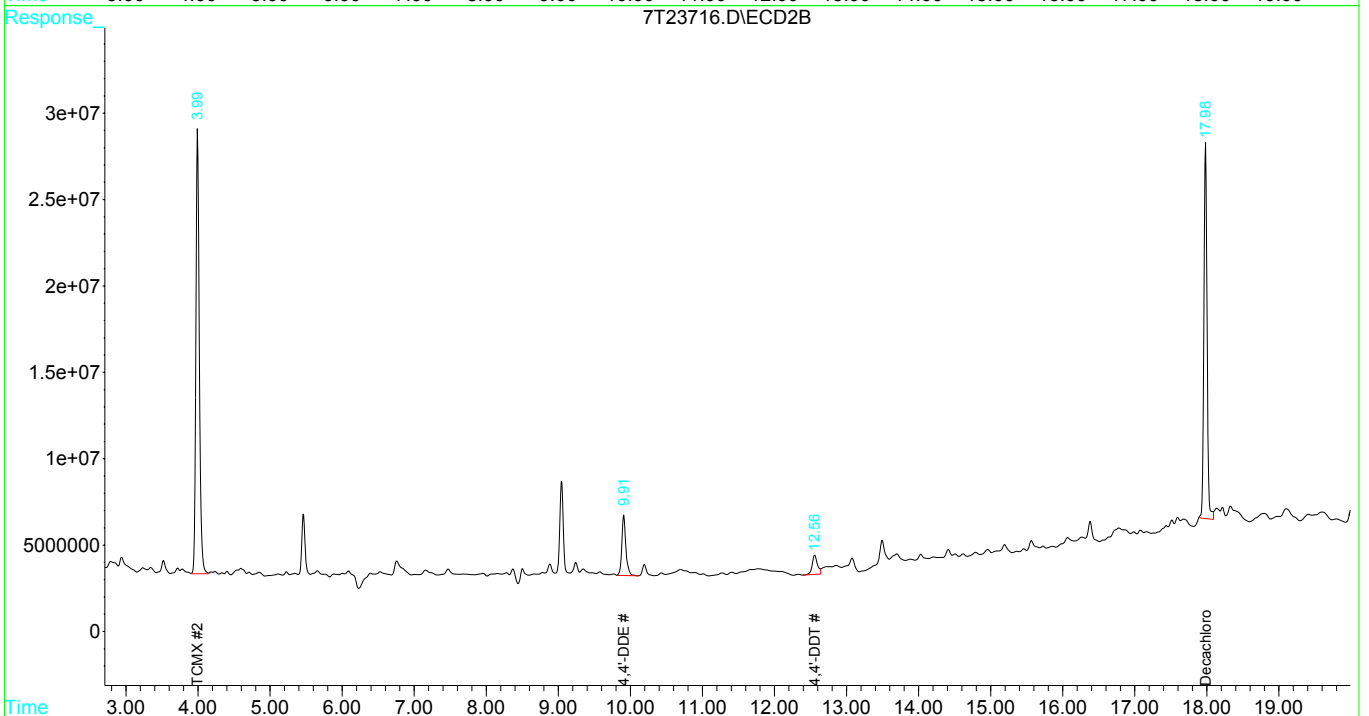
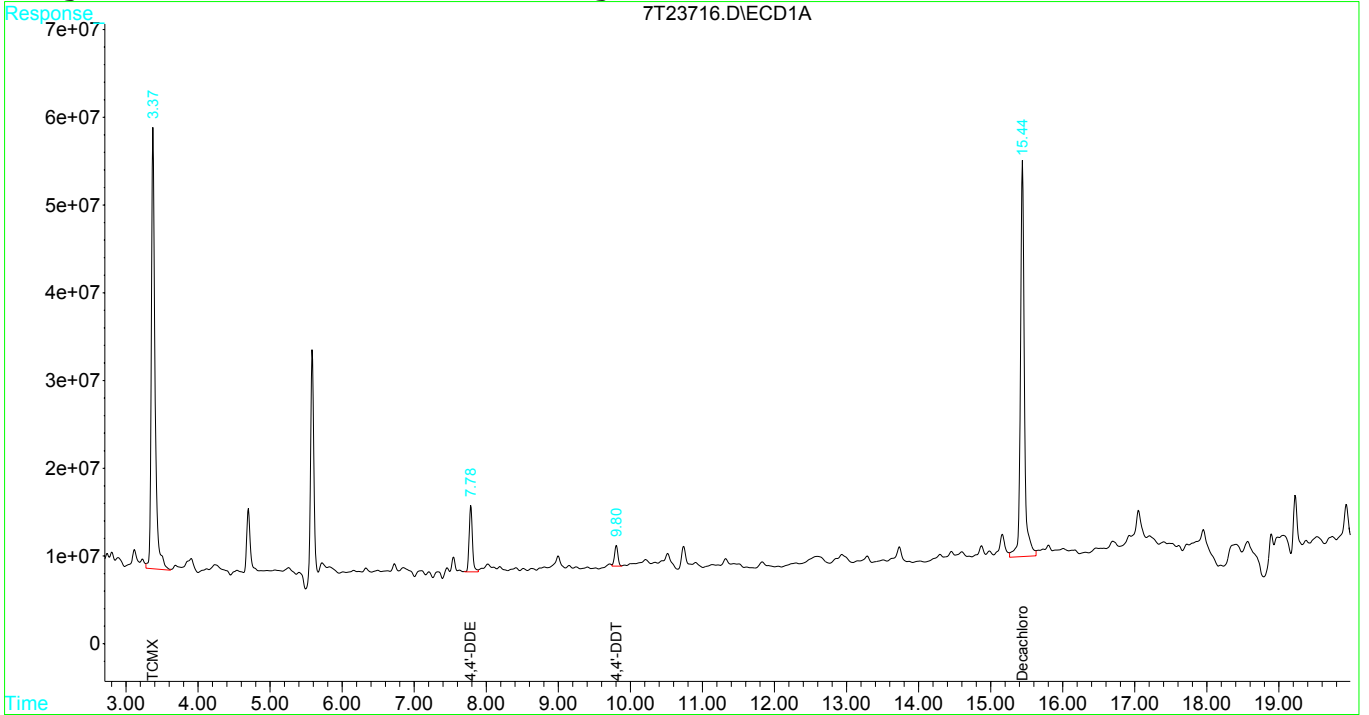
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 (f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23716.D 80810302.M Fri Mar 25 12:47:05 2022 SS

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220324\7T23716.D\ECD1A.CH Vial: 13  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220324\7T23716.D\ECD2B.CH  
Acq On : 24 Mar 2022 16:30 Operator: sdp  
Sample : 2030609-10 Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 18:11 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



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10.2





**Pesticides - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B2C2230**

**Method: SW 846 8081B**

**Prepared: 03/22/2022**

B2C2230-BS1

**Source:**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0455	mg/kg wet	0.0333		136	91.1-141		
4,4'-DDE	0.0454	mg/kg wet	0.0333		136	98.2-139		
4,4'-DDT	0.0459	mg/kg wet	0.0333		138	23.3-144		
Aldrin	0.0468	mg/kg wet	0.0333		140*	75-130		
alpha-BHC	0.0451	mg/kg wet	0.0333		135*	74.3-132		
alpha-Chlordane (cis)	0.0434	mg/kg wet	0.0333		130	70-130		
beta-BHC	0.0487	mg/kg wet	0.0333		146*	76.9-128		
Chlordane	0.0876	mg/kg wet	0.0667		131*	70-130		
delta-BHC	0.0464	mg/kg wet	0.0333		139	61-155		
Dieldrin	0.0449	mg/kg wet	0.0333		135*	74.9-130		
Endosulfan I	0.0436	mg/kg wet	0.0333		131*	60.8-126		
Endosulfan II	0.0422	mg/kg wet	0.0333		127*	72.7-125		
Endosulfan sulfate	0.0411	mg/kg wet	0.0333		123	63.7-128		
Endrin	0.0451	mg/kg wet	0.0333		135	77.7-141		
Endrin aldehyde	0.0363	mg/kg wet	0.0333		109	57.7-113		
Endrin ketone	0.0432	mg/kg wet	0.0333		129	64.1-133		
gamma-BHC (Lindane)	0.0441	mg/kg wet	0.0333		132	74-133		
gamma-Chlordane	0.0443	mg/kg wet	0.0333		133*	70-130		
Heptachlor	0.0445	mg/kg wet	0.0333		133*	74.4-132		
Heptachlor Epoxide	0.0436	mg/kg wet	0.0333		131*	75.2-127		
Methoxychlor	0.0432	mg/kg wet	0.0333		130	37.4-147		

10  
10.4.

\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

**Pesticides - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B2C2230 (cont.)**                      **Method: SW 846 8081B**                      **Prepared: 03/22/2022**  
**B2C2230-MS1**                      **Source: 2030609-01**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0583	mg/kg dry	0.0452	0.000914	127	56.4-168		
4,4'-DDE	0.0714	mg/kg dry	0.0452	0.0183	117	67.4-153		
4,4'-DDT	0.0601	mg/kg dry	0.0452	0.00253	127*	15-117		
Aldrin	0.0561	mg/kg dry	0.0452	ND	124	49.4-130		
alpha-BHC	0.0548	mg/kg dry	0.0452	ND	121	48.9-139		
alpha-Chlordane (cis)	0.0512	mg/kg dry	0.0452	ND	113	60-140		
beta-BHC	0.0669	mg/kg dry	0.0452	ND	148*	43.1-140		
Chlordane	0.102	mg/kg dry	0.0904	ND	113	60-140		
delta-BHC	0.0583	mg/kg dry	0.0452	ND	129	36.1-164		
Dieldrin	0.0546	mg/kg dry	0.0452	ND	121	55.1-122		
Endosulfan I	0.0533	mg/kg dry	0.0452	ND	118*	42.1-110		
Endosulfan II	0.0523	mg/kg dry	0.0452	ND	116	46.9-119		
Endosulfan sulfate	0.0487	mg/kg dry	0.0452	ND	108	24.6-139		
Endrin	0.0565	mg/kg dry	0.0452	ND	125	40.4-139		
Endrin aldehyde	0.0361	mg/kg dry	0.0452	ND	79.7	36.3-126		
Endrin ketone	0.0548	mg/kg dry	0.0452	ND	121	15-149		
gamma-BHC (Lindane)	0.0514	mg/kg dry	0.0452	ND	114	32.3-140		
gamma-Chlordane	0.0508	mg/kg dry	0.0452	ND	112	60-140		
Heptachlor	0.0546	mg/kg dry	0.0452	ND	121	15-147		
Heptachlor Epoxide	0.0534	mg/kg dry	0.0452	ND	118	49-121		
Methoxychlor	0.0492	mg/kg dry	0.0452	ND	109	15-122		

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10.4.

\* - Outside of QC Limits                      J - Result is between the MDL and RL for an Analysis reported to an RL  
NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

**Pesticides - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B2C2230 (cont.)**                      **Method: SW 846 8081B**                      **Prepared: 03/22/2022**  
**B2C2230-MSD1**                      **Source: 2030609-01**

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0577	mg/kg dry	0.0452	0.000914	125	56.4-168	1.17	30
4,4'-DDE	0.0705	mg/kg dry	0.0452	0.0183	115	67.4-153	1.26	30
4,4'-DDT	0.0579	mg/kg dry	0.0452	0.00253	122*	15-117	3.74	30
Aldrin	0.0556	mg/kg dry	0.0452	ND	123	49.4-130	0.940	30
alpha-BHC	0.0539	mg/kg dry	0.0452	ND	119	48.9-139	1.66	30
alpha-Chlordane (cis)	0.0506	mg/kg dry	0.0452	ND	112	60-140	1.19	30
beta-BHC	0.0659	mg/kg dry	0.0452	ND	146*	43.1-140	1.58	30
Chlordane	0.101	mg/kg dry	0.0904	ND	111	60-140	1.17	30
delta-BHC	0.0576	mg/kg dry	0.0452	ND	127	36.1-164	1.20	30
Dieldrin	0.0535	mg/kg dry	0.0452	ND	118	55.1-122	2.11	30
Endosulfan I	0.0521	mg/kg dry	0.0452	ND	115*	42.1-110	2.23	30
Endosulfan II	0.0515	mg/kg dry	0.0452	ND	114	46.9-119	1.55	30
Endosulfan sulfate	0.0479	mg/kg dry	0.0452	ND	106	24.6-139	1.82	30
Endrin	0.0556	mg/kg dry	0.0452	ND	123	40.4-139	1.65	30
Endrin aldehyde	0.0363	mg/kg dry	0.0452	ND	80.3	36.3-126	0.775	30
Endrin ketone	0.0540	mg/kg dry	0.0452	ND	119	15-149	1.48	30
gamma-BHC (Lindane)	0.0508	mg/kg dry	0.0452	ND	112	32.3-140	1.20	30
gamma-Chlordane	0.0502	mg/kg dry	0.0452	ND	111	60-140	1.15	30
Heptachlor	0.0539	mg/kg dry	0.0452	ND	119	15-147	1.18	30
Heptachlor Epoxide	0.0526	mg/kg dry	0.0452	ND	116	49-121	1.52	30
Methoxychlor	0.0475	mg/kg dry	0.0452	ND	105	15-122	3.52	30

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10.4.

\* - Outside of QC Limits                      J - Result is between the MDL and RL for an Analysis reported to an RL  
NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

**Pesticides - Quality Control**  
**Aqua Pro-Tech Laboratories**

**Batch B2C2339**

**Method: SW 846 8081B**

**Prepared: 03/24/2022**

B2C2339-MS1

**Source:** 2030609-10

Analyte	Result	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
4,4'-DDD	0.0584	mg/kg dry	0.0467	ND	125	56.4-168		
4,4'-DDE	0.0616	mg/kg dry	0.0467	0.00564	120	67.4-153		
4,4'-DDT	0.0643	mg/kg dry	0.0467	0.00220	133*	15-117		
Aldrin	0.0589	mg/kg dry	0.0467	ND	126	49.4-130		
alpha-BHC	0.0575	mg/kg dry	0.0467	ND	123	48.9-139		
alpha-Chlordane (cis)	0.0537	mg/kg dry	0.0467	ND	115	60-140		
beta-BHC	0.0672	mg/kg dry	0.0467	ND	144*	43.1-140		
Chlordane	0.104	mg/kg dry	0.0935	ND	111	60-140		
delta-BHC	0.0590	mg/kg dry	0.0467	ND	126	36.1-164		
Dieldrin	0.0582	mg/kg dry	0.0467	ND	125*	55.1-122		
Endosulfan I	0.0538	mg/kg dry	0.0467	ND	115*	42.1-110		
Endosulfan II	0.0551	mg/kg dry	0.0467	ND	118	46.9-119		
Endosulfan sulfate	0.0545	mg/kg dry	0.0467	ND	117	24.6-139		
Endrin	0.0603	mg/kg dry	0.0467	ND	129	40.4-139		
Endrin aldehyde	0.0355	mg/kg dry	0.0467	ND	76.0	36.3-126		
Endrin ketone	0.0607	mg/kg dry	0.0467	ND	130	15-149		
gamma-BHC (Lindane)	0.0511	mg/kg dry	0.0467	ND	109	32.3-140		
gamma-Chlordane	0.0505	mg/kg dry	0.0467	ND	108	60-140		
Heptachlor	0.0561	mg/kg dry	0.0467	ND	120	15-147		
Heptachlor Epoxide	0.0522	mg/kg dry	0.0467	ND	112	49-121		
Methoxychlor	0.0578	mg/kg dry	0.0467	ND	124*	15-122		

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\* - Outside of QC Limits

J - Result is between the MDL and RL for an Analysis reported to an RL

NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III



**Pesticides - Quality Control**  
**Aqua Pro-Tech Laboratories**

<b>Batch B2C2339 (cont.)</b>		<b>Method: SW 846 8081B</b>			<b>Prepared: 03/24/2022</b>			
<b>B2C2339-MSD1</b>		<b>Source: 2030609-10</b>						
<b>Analyte</b>	<b>Result</b>	<b>Units</b>	<b>Spike Level</b>	<b>Source Result</b>	<b>%REC</b>	<b>%REC Limits</b>	<b>RPD</b>	<b>RPD Limit</b>
4,4'-DDD	0.0586	mg/kg dry	0.0467	ND	125	56.4-168	0.368	30
4,4'-DDE	0.0620	mg/kg dry	0.0467	0.00564	121	67.4-153	0.772	30
4,4'-DDT	0.0619	mg/kg dry	0.0467	0.00220	128*	15-117	3.72	30
Aldrin	0.0591	mg/kg dry	0.0467	ND	126	49.4-130	0.349	30
alpha-BHC	0.0574	mg/kg dry	0.0467	ND	123	48.9-139	0.147	30
alpha-Chlordane (cis)	0.0544	mg/kg dry	0.0467	ND	116	60-140	1.33	30
beta-BHC	0.0675	mg/kg dry	0.0467	ND	144*	43.1-140	0.416	30
Chlordane	0.105	mg/kg dry	0.0935	ND	113	60-140	1.06	30
delta-BHC	0.0589	mg/kg dry	0.0467	ND	126	36.1-164	0.127	30
Dieldrin	0.0578	mg/kg dry	0.0467	ND	124*	55.1-122	0.773	30
Endosulfan I	0.0539	mg/kg dry	0.0467	ND	115*	42.1-110	0.104	30
Endosulfan II	0.0548	mg/kg dry	0.0467	ND	117	46.9-119	0.630	30
Endosulfan sulfate	0.0529	mg/kg dry	0.0467	ND	113	24.6-139	3.05	30
Endrin	0.0599	mg/kg dry	0.0467	ND	128	40.4-139	0.545	30
Endrin aldehyde	0.0365	mg/kg dry	0.0467	ND	78.0	36.3-126	2.62	30
Endrin ketone	0.0587	mg/kg dry	0.0467	ND	125	15-149	3.46	30
gamma-BHC (Lindane)	0.0509	mg/kg dry	0.0467	ND	109	32.3-140	0.422	30
gamma-Chlordane	0.0509	mg/kg dry	0.0467	ND	109	60-140	0.775	30
Heptachlor	0.0602	mg/kg dry	0.0467	ND	129	15-147	6.98	30
Heptachlor Epoxide	0.0522	mg/kg dry	0.0467	ND	112	49-121	0.0179	30
Methoxychlor	0.0550	mg/kg dry	0.0467	ND	118	15-122	5.01	30

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10.4.

\* - Outside of QC Limits      J - Result is between the MDL and RL for an Analysis reported to an RL  
NC - Outside the recovery criteria but Spike Amount <1/4 amount found in Source Sample

F-III

## METHOD BLANK SUMMARY

**Batch ID:** B2C2230

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B2C2230-BLK1	BLK1	03/22/2022	03/23/2022 13:42
B2C2230-BS1	BS1	03/22/2022	03/23/2022 14:04
B2C2230-MS1	MS1	03/22/2022	03/25/2022 22:26
B2C2230-MSD1	MSD1	03/22/2022	03/25/2022 22:48
2030609-01	HAP-1	03/22/2022	03/23/2022 21:29
2030609-02	HAP-2	03/22/2022	03/23/2022 21:52
2030609-03	HAP-3	03/22/2022	03/23/2022 22:14
2030609-04	HAP-4	03/22/2022	03/23/2022 22:36
2030609-05	HAP-5	03/22/2022	03/23/2022 22:58
2030609-06	HAP-6	03/22/2022	03/23/2022 23:21
2030609-07	HAP-7	03/22/2022	03/23/2022 23:43
2030609-08	HAP-8	03/22/2022	03/24/2022 00:05
2030609-09	HAP-9	03/22/2022	03/24/2022 00:27

**Batch ID:** B2C2339

<u>Lab Number</u>	<u>Sample Id</u>	<u>Extraction Date</u>	<u>Analysis Date</u>
B2C2339-MS1	MS1	03/24/2022	03/25/2022 20:34
B2C2339-MSD1	MSD1	03/24/2022	03/25/2022 20:57
2030609-10	HAP-10	03/24/2022	03/24/2022 16:30

# SURROGATE RT DRIFT REPORT

Analysis Class: PESTICIDES

**Sequence : S2C2507**

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
2030609-10	7T23716.D	3.38	3.38	0.00	15.44	15.44	0.00	4	3.99	0.01	17.98	17.98	0.00

**Sequence : S2C2514**

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2C2230-BLK1	7T23669.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
B2C2230-BS1	7T23670.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
2030609-01	7T23690.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
2030609-02	7T23691.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
2030609-03	7T23692.D	3.37	3.37	0.00	15.44	15.43	0.01	3.99	3.99	0.00	17.98	17.97	0.01
2030609-04	7T23693.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
2030609-05	7T23694.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
2030609-06	7T23695.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
2030609-07	7T23696.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00
2030609-08	7T23697.D	3.38	3.37	0.01	15.44	15.43	0.01	4	3.99	0.01	17.97	17.97	0.00
2030609-09	7T23698.D	3.37	3.37	0.00	15.43	15.43	0.00	3.99	3.99	0.00	17.97	17.97	0.00

**Sequence : S2C2811**

		TCMX			DCB			TCMX[2C]			DCB[2C]		
Lab Number	File ID	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift	RT	Ref RT	Drift
B2C2339-MS1	7T23758.D	3.38	3.38	0.00	15.45	15.45	0.00	4	4	0.00	17.99	17.99	0.00
B2C2339-MSD1	7T23759.D	3.38	3.38	0.00	15.45	15.45	0.00	4	4	0.00	17.99	17.99	0.00
B2C2230-MS1	7T23763.D	3.38	3.38	0.00	15.45	15.45	0.00	4	4	0.00	17.99	17.99	0.00
B2C2230-MSD1	7T23764.D	3.38	3.38	0.00	15.45	15.45	0.00	4	4	0.00	17.99	17.99	0.00

	Surrogate	Limit
	TCMX	Tetrachloro-m-xylene
	DCB	Decachlorobiphenyl
	TCMX[2C]	Tetrachloro-m-xylene [2C]
	DCB[2C]	Decachlorobiphenyl [2C]
		0.10
		0.10
		0.10
		0.10

DISS = Dissolved Analysis

F-V

10 10.6.

Response Factor Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 02 16:54:21 2022

Calibration Files

2 =7T23132.D 5 =7T23133.D 10 =7T23134.D  
 25 =7T23135.D 50 =7T23136.D 100 =7T23137.D

Compound	2	5	10	25	50	100	Avg	%RSD
1) S TCMX	3.583	3.656	3.526	3.519	3.496	3.256	3.506	E7 3.86
2) alpha-BHC	4.896	5.066	5.324	5.728	6.001	5.502	5.419	E7 7.60
3) M gamma-BHC (Lindane)	4.751	4.879	4.986	5.315	5.526	5.025	5.080	E7 5.66
4) M Heptachlor	5.183	5.119	5.231	5.324	5.378	4.774	5.168	E7 4.15
5) beta-BHC	2.186	2.321	2.187	2.260	2.267	2.031	2.209	E7 4.58
6) delta-BHC	4.686	4.613	4.903	5.293	5.530	5.093	5.020	E7 7.08
7) M Aldrin	4.341	4.408	4.554	4.741	4.869	4.361	4.546	E7 4.80
8) Heptachlor epoxide	4.305	4.363	4.405	4.462	4.522	4.010	4.344	E7 4.15
9) Endosulfan I	4.044	4.063	4.130	4.185	4.225	3.760	4.068	E7 4.08
10) 4,4'-DDE	4.215	3.761	3.908	4.043	4.175	3.793	3.982	E7 4.83
11) M Dieldrin	4.135	4.012	4.110	4.258	4.392	3.962	4.145	E7 3.84
12) M Endrin	3.974	3.750	3.893	4.012	4.143	3.686	3.910	E7 4.36
13) 4,4'-DDD	3.072	3.044	3.143	3.280	3.399	3.073	3.168	E7 4.46
14) Endosulfan II	3.858	3.703	3.728	3.764	3.786	3.360	3.700	E7 4.72
15) M 4,4'-DDT	3.286	3.226	3.331	3.437	3.562	3.242	3.347	E7 3.87
16) Endrin aldehyde	3.436	3.127	3.134	3.121	3.096	2.766	3.113	E7 6.82
17) Endosulfan sulfate	3.759	3.535	3.522	3.506	3.504	3.085	3.485	E7 6.28
18) Methoxychlor	2.201	2.026	1.985	1.932	1.910	1.684	1.956	E7 8.63
19) Mirex	3.442	3.256	3.172	3.002	2.903	2.526	3.050	E7 10.46
20) Endrin ketone	4.053	3.886	3.911	3.954	3.982	3.527	3.886	E7 4.77
21) S Decachlorobiphenyl	4.006	3.474	3.457	3.290	3.181	2.761	3.362	E7 12.16
22) L1 Chlordane (gamma)	4.569	4.306	4.356	4.461	4.591	4.147	4.405	E7 3.85
23) L1 Chlordane (alpha)	4.355	4.234	4.338	4.392	4.470	4.017	4.301	E7 3.69
24) L2 Toxaphene (1)						0.000	0	-1.00

Signal #2 Calibration Files

2 =7T23132.D 5 =7T23133.D 10 =7T23134.D  
 25 =7T23135.D 50 =7T23136.D 100 =7T23137.D

Compound	2	5	10	25	50	100	Avg	%RSD
1) S TCMX	1.662	1.595	1.612	1.633	1.642	1.520	1.611	E7 3.12
2) alpha-BHC	2.178	2.246	2.410	2.690	2.904	2.737	2.527	E7 11.56
3) M gamma-BHC (Lindane)	2.172	2.212	2.340	2.535	2.704	2.519	2.414	E7 8.58
4) M Heptachlor	2.332	2.317	2.390	2.477	2.572	2.358	2.408	E7 4.09
5) beta-BHC	1.089	1.062	1.058	1.052	1.056	0.949	1.044	E7 4.66
6) delta-BHC	2.096	2.099	2.223	2.457	2.633	2.458	2.328	E7 9.48
7) M Aldrin	1.985	1.969	2.041	2.176	2.293	2.119	2.097	E7 5.92
8) Heptachlor epoxide	2.028	1.966	1.983	2.037	2.104	1.926	2.007	E7 3.12
9) Endosulfan I	1.902	1.850	1.850	1.871	1.924	1.758	1.859	E7 3.09
10) 4,4'-DDE	1.717	1.679	1.708	1.774	1.883	1.767	1.755	E7 4.12
11) M Dieldrin	1.801	1.723	1.770	1.860	1.973	1.840	1.828	E7 4.73
12) M Endrin	1.680	1.620	1.684	1.769	1.870	1.734	1.726	E7 5.02
13) 4,4'-DDD	1.453	1.372	1.388	1.452	1.537	1.434	1.439	E7 4.06
14) Endosulfan II	1.960	1.816	1.781	1.778	1.809	1.646	1.798	E7 5.58
15) M 4,4'-DDT	1.296	1.338	1.418	1.506	1.606	1.511	1.446	E7 8.08
16) Endrin aldehyde	1.662	1.557	1.586	1.498	1.475	1.336	1.519	E7 7.35
17) Endosulfan sulfate	1.870	1.688	1.657	1.666	1.697	1.504	1.680	E7 6.94
18) Methoxychlor	8.626	8.882	8.538	8.338	8.333	7.489	8.368	E6 5.69
19) Mirex	1.560	1.416	1.368	1.280	1.235	1.073	1.322	E7 12.60
20) Endrin ketone	1.616	1.586	1.611	1.659	1.709	1.556	1.623	E7 3.34
21) S Decachlorobiphenyl	1.438	1.403	1.399	1.350	1.330	1.173	1.349	E7 7.01
22) L1 Chlordane (gamma)	2.079	1.927	1.951	2.014	2.097	1.925	1.999	E7 3.82
23) L1 Chlordane (alpha)	2.045	1.930	1.939	1.978	2.035	1.856	1.964	E7 3.61
24) L2 Toxaphene (1)						0.000	0	-1.00

(#) = Out of Range  
 80810302.M

Thu Mar 03 15:09:02 2022 SS

Page 1

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10.7.

Compound List Report HP G1530A

Method : G:\HPCHEM\GCECD7\METHODS\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 02 16:54:21 2022  
 Response via : Initial Calibration  
 Total Cpnds : 49

PK#	Type	Compound Name	Exp_RT	Rel_RT	Cal	A/H	ID
1	S	TCMX	3.30	1.000	A	A	B
2		alpha-BHC	4.00	1.000	A	A	B
3	M	gamma-BHC (Lindane)	4.45	1.000	A	A	B
4	M	Heptachlor	5.22	1.000	A	A	B
5		beta-BHC	4.58	1.000	A	A	B
6		delta-BHC	4.87	1.000	A	A	B
7	M	Aldrin	5.76	1.000	A	A	B
8		Heptachlor epoxide	6.95	1.000	A	A	B
9		Endosulfan I	7.77	1.000	A	A	B
10		4,4'-DDE	7.69	1.000	A	A	B
11	M	Dieldrin	8.30	1.000	A	A	B
12	M	Endrin	8.82	1.000	A	A	B
13		4,4'-DDD	9.05	1.000	A	A	B
14		Endosulfan II	9.34	1.000	A	A	B
15	M	4,4'-DDT	9.71	1.000	A	A	B
16		Endrin aldehyde	10.36	1.000	A	A	B
17		Endosulfan sulfate	11.58	1.000	A	A	B
18		Methoxychlor	11.05	1.000	A	A	B
19		Mirex	11.17	1.000	A	A	B
20		Endrin ketone	12.43	1.000	A	A	B
21	S	Decachlorobiphenyl	15.35	1.000	A	A	B
22	L1	Chlordane (gamma)	7.20	1.000	A	A	B
23	L1	Chlordane (alpha)	7.49	1.000	A	A	B
24	L2	Toxaphene (1)	8.95	1.000	A	A	R
25		Signal #2	35.00	1.000	A	A	B
26	S	TCMX #2	3.91	1.000	A	A	B
27		alpha-BHC #2	4.92	1.000	A	A	B
28	M	gamma-BHC (Lindane) #2	5.60	1.000	A	A	B
29	M	Heptachlor #2	6.52	1.000	A	A	B
30		beta-BHC #2	5.75	1.000	A	A	B
31		delta-BHC #2	6.37	1.000	A	A	B
32	M	Aldrin #2	7.23	1.000	A	A	B
33		Heptachlor epoxide #2	8.55	1.000	A	A	B
34		Endosulfan I #2	9.49	1.000	A	A	B
35		4,4'-DDE #2	9.80	1.000	A	A	B
36	M	Dieldrin #2	10.17	1.000	A	A	B
37	M	Endrin #2	10.98	1.000	A	A	B
38		4,4'-DDD #2	11.39	1.000	A	A	B
39		Endosulfan II #2	11.63	1.000	A	A	B
40	M	4,4'-DDT #2	12.42	1.000	A	A	B
41		Endrin aldehyde #2	12.74	1.000	A	A	B
42		Endosulfan sulfate #2	13.57	1.000	A	A	B
43		Methoxychlor #2	14.51	1.000	A	A	B
44		Mirex #2	14.86	1.000	A	A	B
45		Endrin ketone #2	14.99	1.000	A	A	B
46	S	Decachlorobiphenyl #2	17.90	1.000	A	A	B
47	L1	Chlordane (gamma) #2	9.00	1.000	A	A	B
48	L1	Chlordane (alpha) #2	9.36	1.000	A	A	B
49	L2	Toxaphene (1) #2	11.09	1.000	A	A	R

Cal A = Average L = Linear LO = Linear w/origin Q = Quad QO = Quad w/origin  
 A/H = Area or Height  
 ID R = R.T. B = R.T. & Q Q = Qvalue L = Largest A = All

-----  
 80810302.M Thu Mar 03 15:09:01 2022 SS



# CALIBRATION VERIFICATION SUMMARY

**Client:** Sesi Consulting Engineers  
**Work Order:** 2030609

Lab Sample ID (50): S2C2514-CCV1(1)      Init. Calib. Date(s): 03/02/2022  
 File ID: 7T23668.D      Date Analyzed: 03/23/2022 13:19  
 Pesticides: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.84	05.74	05.94	45456060	49225060	8.30
alpha-BHC	04.07	03.97	04.17	54193170	60162960	11.00
alpha-Chlordane (cis)	07.57	07.47	07.67	43009870	45408140	5.60
beta-BHC	04.65	04.55	04.75	22086410	23902060	8.20
delta-BHC	04.94	04.84	05.04	50197650	56581740	12.70
Dieldrin	08.39	08.29	08.49	41446500	44027140	6.20
Endosulfan I	07.86	07.76	07.96	40678480	42901220	5.50
Endosulfan II	09.42	09.32	09.52	36997160	37866180	2.30
Endosulfan sulfate	11.69	11.59	11.79	34850610	34597600	0.70
Endrin	08.91	08.81	09.01	39097830	42142440	7.80
Endrin aldehyde	10.45	10.35	10.55	31132980	30397400	2.40
Endrin ketone	12.53	12.43	12.63	38855770	38425220	1.10
gamma-Chlordane	07.29	07.19	07.39	44051210	47096740	6.90
gamma-BHC (Lindane)	04.53	04.43	04.63	50802310	55669740	9.60
4,4'-DDT	09.79	09.69	09.89	33473360	36189300	8.10
4,4'-DDE	07.77	07.67	07.87	39824390	42655000	7.10
4,4'-DDD	09.13	09.03	09.23	31682790	34164020	7.80
Methoxychlor	11.14	11.04	11.24	19564180	19210740	1.80
Heptachlor Epoxide	07.03	06.93	07.13	43444890	46034300	6.00
Heptachlor	05.30	05.20	05.40	51684250	55041940	6.50
Chlordane	07.57	07.47	07.67	43530540	46252440	6.30
Decachlorobiphenyl	15.43	15.33	15.53	33615660	37229680	10.80
Tetrachloro-m-xylene	03.37	03.27	03.47	35059760	35853860	2.30

\* - Outside of QC limits

F-VII

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10.8.

# CALIBRATION VERIFICATION SUMMARY

**Client:**           Sesi Consulting Engineers  
**Work Order:**   2030609

Lab Sample ID (50):           S2C2514-CCV1(2)                           Init. Calib. Date(s):   03/02/2022  
 File ID:                         7T23668.D                                     Date Analyzed:        03/23/2022 13:19  
 Pesticides                     Column 2                                       Matrix:                 Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	07.33	07.23	07.43	20970940	22553800	7.50
alpha-BHC [2C]	05.00	04.90	05.10	25274320	27825100	10.10
alpha-Chlordane (cis) [2C]	09.46	09.36	09.56	19639350	19990380	1.80
beta-BHC [2C]	05.84	05.74	05.94	10443570	10182310	2.50
delta-BHC [2C]	06.46	06.36	06.56	23276850	25500420	9.60
Dieldrin [2C]	10.27	10.17	10.37	18279820	19292040	5.50
Endosulfan I [2C]	09.59	09.49	09.69	18591030	18603790	0.10
Endosulfan II [2C]	11.76	11.66	11.86	17983880	17514270	2.60
Endosulfan sulfate [2C]	13.68	13.58	13.78	16803310	15587940	7.20
Endrin [2C]	11.10	11.00	11.20	17261950	18342900	6.30
Endrin aldehyde [2C]	12.86	12.76	12.96	15190140	14373250	5.40
Endrin ketone [2C]	15.09	14.99	15.19	16228850	16005770	1.40
gamma-Chlordane [2C]	09.10	09.00	09.20	19988680	20747180	3.80
gamma-BHC (Lindane) [2C]	05.69	05.59	05.79	24138540	26054620	7.90
4,4'-DDT [2C]	12.54	12.44	12.64	14456820	16036730	10.90
4,4'-DDE [2C]	09.90	09.80	10.00	17548060	18505830	5.50
4,4'-DDD [2C]	11.51	11.41	11.61	14391930	15332150	6.50
Methoxychlor [2C]	14.60	14.50	14.70	8367680	7835752	6.40
Heptachlor Epoxide [2C]	08.65	08.55	08.75	20074710	20557320	2.40
Heptachlor [2C]	06.61	06.51	06.71	24076100	24540620	1.90
Chlordane [2C]	09.46	09.36	09.56	19814010	20368780	2.80
Decachlorobiphenyl [2C]	17.97	17.87	18.07	13490840	17367650	28.70 *
Tetrachloro-m-xylene [2C]	03.99	03.89	04.09	16106040	15476470	3.90

\* - Outside of QC limits

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10.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23668.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23668.D\ECD2B.CH  
 Acq On : 23 Mar 2022 13:19 Operator: sdp  
 Sample : SEQ-CCV@50ppb Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 23 16:15 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Tue Mar 22 15:37:53 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.37	3.99	1792.7E6	773.8E6	51.133	48.046
Spiked Amount	50.000	Range	43 - 129	Recovery	= 102.27%	96.09%
21) S Decachlorobiphen	15.43	17.97	1861.5E6	868.4E6	55.376	64.368
Spiked Amount	50.000	Range	42 - 136	Recovery	= 110.75%	128.74%
Target Compounds						
2) alpha-BHC	4.07	5.00	3008.1E6	1391.3E6	55.508	55.046
3) M gamma-BHC (Linda)	4.53	5.69	2783.5E6	1302.7E6	54.791	53.969
4) M Heptachlor	5.30	6.61	2752.1E6	1227.0E6	53.248	50.965
5) beta-BHC	4.65	5.84	1195.1E6	509.1E6	54.110	48.749
6) delta-BHC	4.94	6.46	2829.1E6	1275.0E6	56.359	54.776
7) M Aldrin	5.84	7.33	2461.3E6	1127.7E6	54.146	53.774
8) Heptachlor epoxi	7.03	8.65	2301.7E6	1027.9E6	52.980	51.202
9) Endosulfan I	7.86	9.59	2145.1E6	930.2E6	52.732	50.034
10) 4,4'-DDE	7.77	9.90	2132.8E6	925.3E6	53.554	52.729
11) M Dieldrin	8.39	10.27	2201.4E6	964.6E6	53.113	52.769
12) M Endrin	8.91	11.10	2107.1E6	917.1E6	53.894	53.131
13) 4,4'-DDD	9.13	11.51	1708.2E6	766.6E6	53.916	53.266
14) Endosulfan II	9.42	11.76	1893.3E6	875.7E6	51.174	48.694
15) M 4,4'-DDT	9.79	12.54	1809.5E6	801.8E6	54.057	55.464
16) Endrin aldehyde	10.45	12.86	1519.9E6	718.7E6	48.819	47.311
17) Endosulfan sulfa	11.69	13.68	1729.9E6	779.4E6	49.637	46.384
18) Methoxychlor	11.14	14.60	960.5E6	391.8E6	49.097	46.822
19) Mirex	11.28	14.96	1466.2E6	576.9E6	48.068	43.635
20) Endrin ketone	12.53	15.09	1921.3E6	800.3E6	49.446	49.313
22) L1 Chlordane (gamma)	7.29	9.10	2354.8E6	1037.4E6	53.457	51.897
23) L1 Chlordane (alpha)	7.57	9.46	2270.4E6	999.5E6	52.788	50.894
Sum Chlordane (gamma)			4625.2E6	2036.9E6	106.245	102.791
Average Chlordane (gamma)					53.122	51.396
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23668.D 80810302.M Fri Mar 25 16:40:30 2022 SS

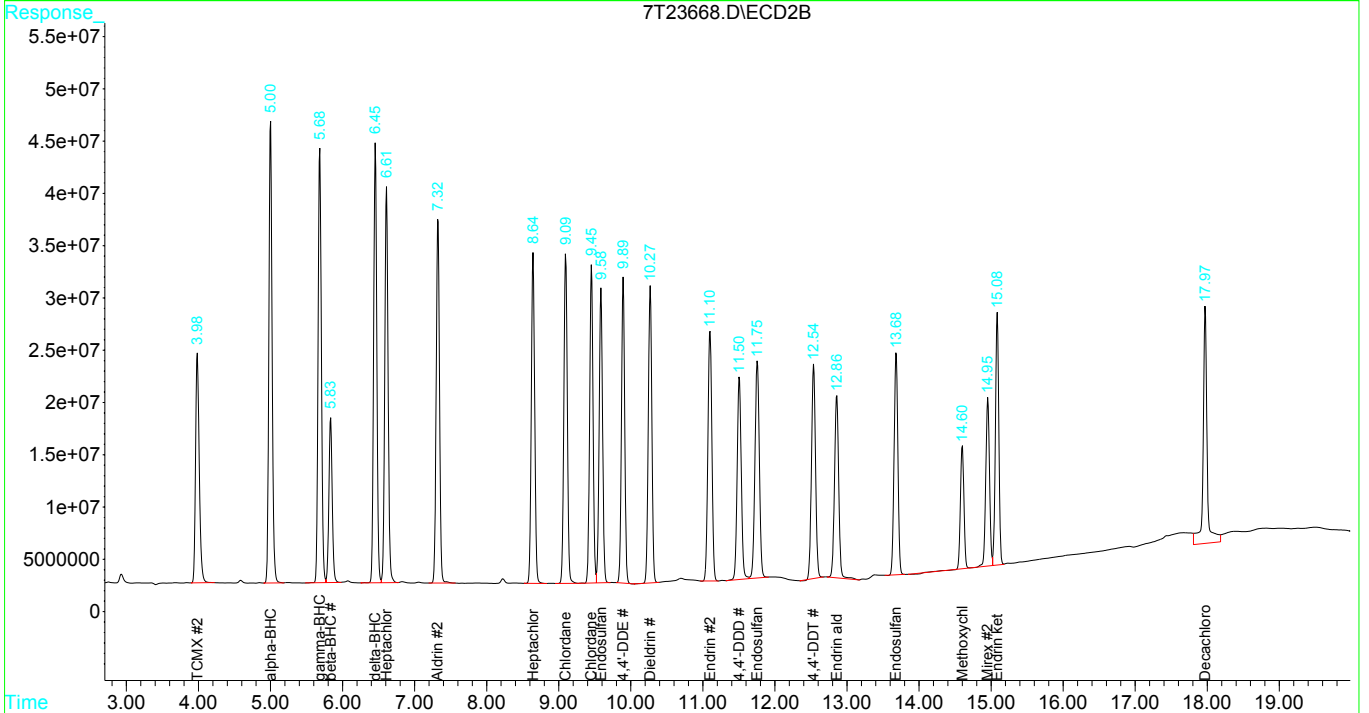
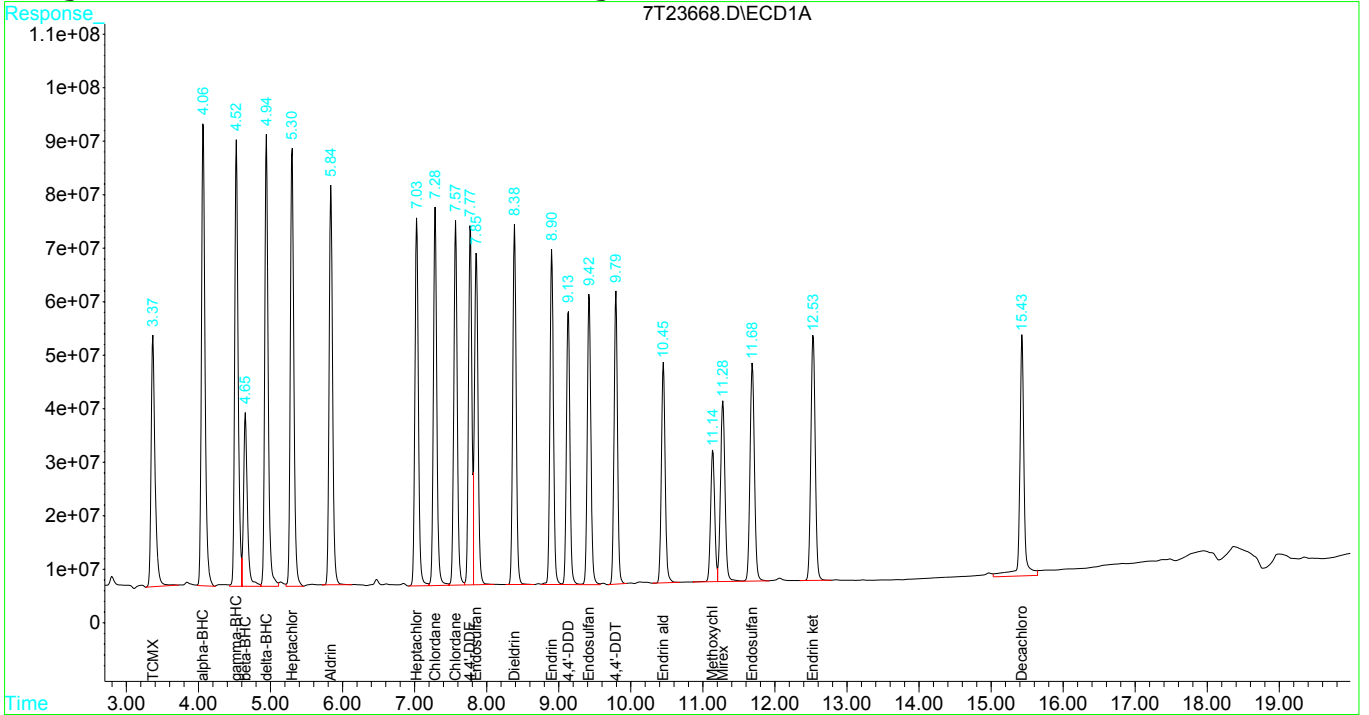
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10.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220323\7T23668.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220323\7T23668.D\ECD2B.CH  
 Acq On : 23 Mar 2022 13:19 Operator: sdp  
 Sample : SEQ-CCV@50ppb Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 23 16:15 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Tue Mar 22 15:37:53 2022  
 Response via : Multiple Level Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



# CALIBRATION VERIFICATION SUMMARY

**Client:** Sesi Consulting Engineers  
**Work Order:** 2030609

Lab Sample ID (50): S2C2507-CCV1(1)      Init. Calib. Date(s): 03/02/2022  
 File ID: 7T23706.D      Date Analyzed: 03/24/2022 12:47  
 Pesticides: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.85	05.75	05.95	45456060	50906140	12.00
alpha-BHC	04.07	03.97	04.17	54193170	62016160	14.40
alpha-Chlordane (cis)	07.58	07.48	07.68	43009870	46771060	8.70
beta-BHC	04.66	04.56	04.76	22086410	24046220	8.90
delta-BHC	04.95	04.85	05.05	50197650	57483360	14.50
Dieldrin	08.40	08.30	08.50	41446500	45311280	9.30
Endosulfan I	07.87	07.77	07.97	40678480	44238840	8.80
Endosulfan II	09.44	09.34	09.54	36997160	38943940	5.30
Endosulfan sulfate	11.70	11.60	11.80	34850610	36174360	3.80
Endrin	08.92	08.82	09.02	39097830	43167960	10.40
Endrin aldehyde	10.47	10.37	10.57	31132980	31430840	1.00
Endrin ketone	12.55	12.45	12.65	38855770	40355940	3.90
gamma-Chlordane	07.30	07.20	07.40	44051210	48581180	10.30
gamma-BHC (Lindane)	04.54	04.44	04.64	50802310	56800820	11.80
4,4'-DDT	09.81	09.71	09.91	33473360	37417400	11.80
4,4'-DDE	07.78	07.68	07.88	39824390	43979980	10.40
4,4'-DDD	09.14	09.04	09.24	31682790	35212400	11.10
Methoxychlor	11.15	11.05	11.25	19564180	19838680	1.40
Heptachlor Epoxide	07.04	06.94	07.14	43444890	47373100	9.00
Heptachlor	05.31	05.21	05.41	51684250	56534080	9.40
Chlordane	07.58	07.48	07.68	43530540	47676120	9.50
Decachlorobiphenyl	15.44	15.34	15.54	33615660	33884820	0.80
Tetrachloro-m-xylene	03.38	03.28	03.48	35059760	36994860	5.50

\* - Outside of QC limits

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10.8.



# CALIBRATION VERIFICATION SUMMARY

**Client:**           Sesi Consulting Engineers  
**Work Order:**   2030609

Lab Sample ID (50):           S2C2507-CCV1(2)                           Init. Calib. Date(s):   03/02/2022  
 File ID:                         7T23706.D                                     Date Analyzed:        03/24/2022 12:47  
 Pesticides                     Column 2                                     Matrix:                 Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin [2C]	07.34	07.24	07.44	20970940	23203940	10.60
alpha-BHC [2C]	05.01	04.91	05.11	25274320	28634900	13.30
alpha-Chlordane (cis) [2C]	09.47	09.37	09.57	19639350	20526860	4.50
beta-BHC [2C]	05.84	05.74	05.94	10443570	10422930	0.20
delta-BHC [2C]	06.47	06.37	06.57	23276850	25921140	11.40
Dieldrin [2C]	10.28	10.18	10.38	18279820	19816280	8.40
Endosulfan I [2C]	09.60	09.50	09.70	18591030	19173230	3.10
Endosulfan II [2C]	11.77	11.67	11.87	17983880	18379530	2.20
Endosulfan sulfate [2C]	13.70	13.60	13.80	16803310	16435860	2.20
Endrin [2C]	11.11	11.01	11.21	17261950	19026150	10.20
Endrin aldehyde [2C]	12.87	12.77	12.97	15190140	15022900	1.10
Endrin ketone [2C]	15.10	15.00	15.20	16228850	16904670	4.20
gamma-Chlordane [2C]	09.11	09.01	09.21	19988680	21254200	6.30
gamma-BHC (Lindane) [2C]	05.69	05.59	05.79	24138540	26706140	10.60
4,4'-DDT [2C]	12.55	12.45	12.65	14456820	16674170	15.30
4,4'-DDE [2C]	09.91	09.81	10.01	17548060	18912980	7.80
4,4'-DDD [2C]	11.52	11.42	11.62	14391930	15768120	9.60
Methoxychlor [2C]	14.61	14.51	14.71	8367680	8517914	1.80
Heptachlor Epoxide [2C]	08.66	08.56	08.76	20074710	21075000	5.00
Heptachlor [2C]	06.62	06.52	06.72	24076100	25090200	4.20
Chlordane [2C]	09.47	09.37	09.57	19814010	20890530	5.40
Decachlorobiphenyl [2C]	17.98	17.88	18.08	13490840	13855070	2.70
Tetrachloro-m-xylene [2C]	03.99	03.89	04.09	16106040	15751600	2.20

\* - Outside of QC limits

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10.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220324\7T23706.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220324\7T23706.D\ECD2B.CH  
 Acq On : 24 Mar 2022 12:47 Operator: sdp  
 Sample : SEQ-CCV@50ppb Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 24 18:10 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.38	3.99	1849.7E6	787.6E6	52.760	48.900
Spiked Amount	50.000	Range	43 - 129	Recovery =	105.52%	97.80%
21) S Decachlorobiphen	15.44	17.98	1694.2E6	692.8E6	50.400	51.350
Spiked Amount	50.000	Range	42 - 136	Recovery =	100.80%	102.70%
Target Compounds						
2) alpha-BHC	4.07	5.01	3100.8E6	1431.7E6	57.218	56.648
3) M gamma-BHC (Linda)	4.54	5.69	2840.0E6	1335.3E6	55.904	55.318
4) M Heptachlor	5.31	6.62	2826.7E6	1254.5E6	54.692	52.106
5) beta-BHC	4.66	5.84	1202.3E6	521.1E6	54.437	49.901
6) delta-BHC	4.95	6.47	2874.2E6	1296.1E6	57.257	55.680
7) M Aldrin	5.85	7.34	2545.3E6	1160.2E6	55.995	55.324
8) Heptachlor epoxi	7.04	8.66	2368.7E6	1053.7E6	54.521	52.491
9) Endosulfan I	7.87	9.60	2211.9E6	958.7E6	54.376	51.566
10) 4,4'-DDE	7.78	9.91	2199.0E6	945.6E6	55.217	53.889
11) M Dieldrin	8.40	10.28	2265.6E6	990.8E6	54.662	54.203
12) M Endrin	8.92	11.11	2158.4E6	951.3E6	55.205	55.110
13) 4,4'-DDD	9.14	11.52	1760.6E6	788.4E6	55.570	54.781
14) Endosulfan II	9.44	11.77	1947.2E6	919.0E6	52.631	51.100
15) M 4,4'-DDT	9.81	12.55	1870.9E6	833.7E6	55.891	57.669
16) Endrin aldehyde	10.47	12.87	1571.5E6	751.1E6	50.478	49.450
17) Endosulfan sulfa	11.70	13.70	1808.7E6	821.8E6	51.899	48.907
18) Methoxychlor	11.15	14.61	991.9E6	425.9E6	50.702	50.898
19) Mirex	11.29	14.97	1529.9E6	624.2E6	50.157	47.212
20) Endrin ketone	12.55	15.10	2017.8E6	845.2E6	51.930	52.082
22) L1 Chlordane (gamma)	7.30	9.11	2429.1E6	1062.7E6	55.142	53.166
23) L1 Chlordane (alpha)	7.58	9.47	2338.6E6	1026.3E6	54.372	52.260
Sum Chlordane (gamma)			4767.6E6	2089.1E6	109.514	105.425
Average Chlordane (gamma)					54.757	52.713
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23706.D 80810302.M Fri Mar 25 12:46:47 2022 SS

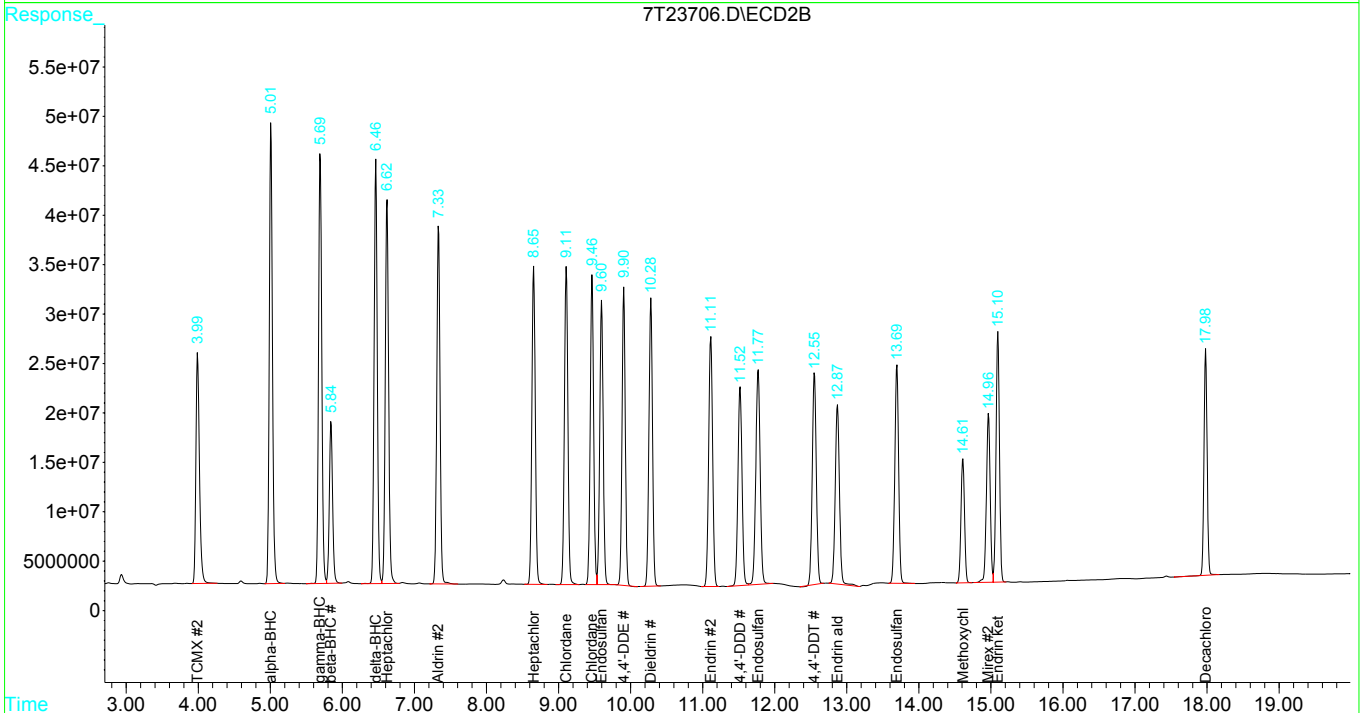
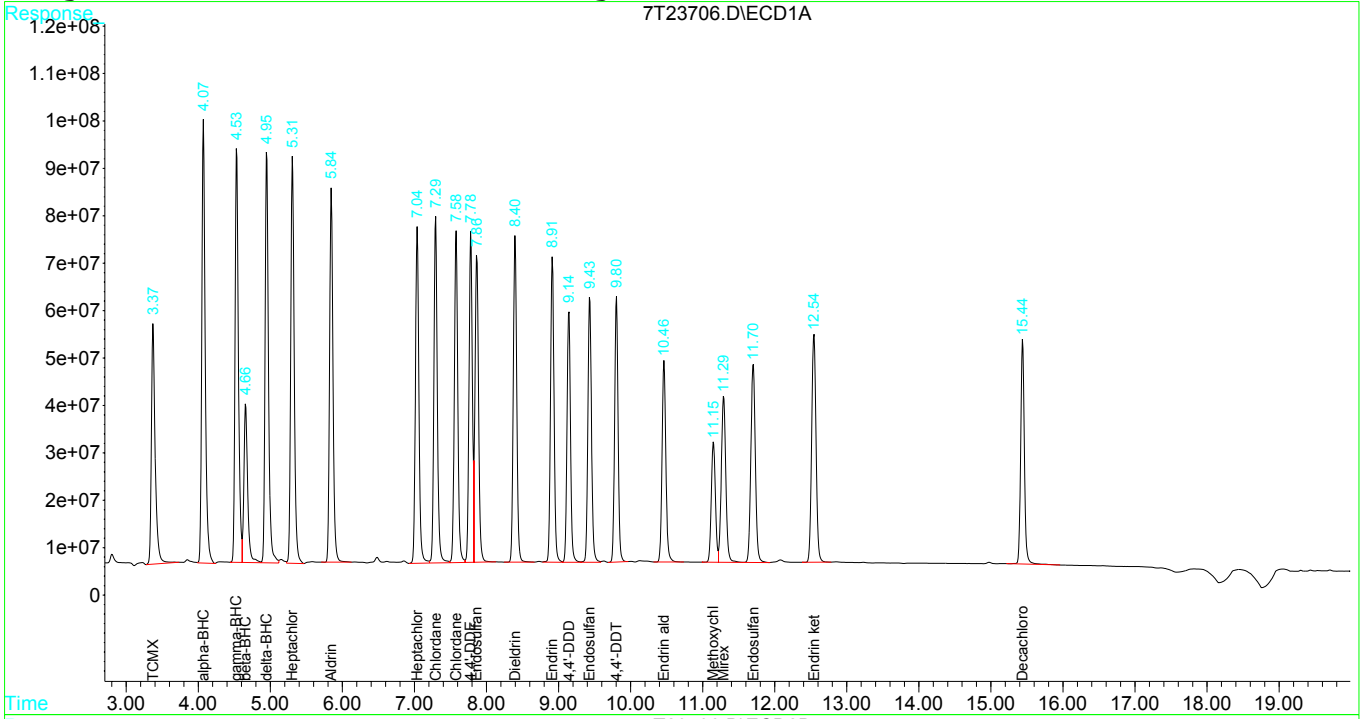
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10.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220324\7T23706.D\ECD1A.CH Vial: 3  
Signal #2 : G:\HPCHEM\GCECD7\DATA\20220324\7T23706.D\ECD2B.CH  
Acq On : 24 Mar 2022 12:47 Operator: sdp  
Sample : SEQ-CCV@50ppb Inst : GCECD-7  
Misc : Multiplr: 1.00  
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
Quant Time: Mar 24 18:10 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
Title : Pesticides by Method SW-846 8081B  
Last Update : Wed Mar 23 16:16:30 2022  
Response via : Multiple Level Calibration  
DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



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10.8.

# CALIBRATION VERIFICATION SUMMARY

**Client:** Sesi Consulting Engineers  
**Work Order:** 2030609

Lab Sample ID (50): S2C2811-CCV1(1)      Init. Calib. Date(s): 03/02/2022  
 File ID: 7T23743.D      Date Analyzed: 03/25/2022 15:00  
 Pesticides: Column 1      Matrix: Soil

Individual Mix Compound		RT WINDOW		$\overline{CF}$	CF	%D
		FROM	TO			
Aldrin	05.85	05.75	05.95	45456060	51844300	14.10
alpha-BHC	04.08	03.98	04.18	54193170	64035260	18.20
alpha-Chlordane (cis)	07.59	07.49	07.69	43009870	47868680	11.30
beta-BHC	04.67	04.57	04.77	22086410	24605080	11.40
delta-BHC	04.96	04.86	05.06	50197650	58914280	17.40
Dieldrin	08.40	08.30	08.50	41446500	45700640	10.30
Endosulfan I	07.87	07.77	07.97	40678480	44591420	9.60
Endosulfan II	09.44	09.34	09.54	36997160	39574720	7.00
Endosulfan sulfate	11.71	11.61	11.81	34850610	36845620	5.70
Endrin	08.92	08.82	09.02	39097830	43947460	12.40
Endrin aldehyde	10.47	10.37	10.57	31132980	32074540	3.00
Endrin ketone	12.55	12.45	12.65	38855770	40912300	5.30
gamma-Chlordane	07.30	07.20	07.40	44051210	49638860	12.70
gamma-BHC (Lindane)	04.54	04.44	04.64	50802310	58636460	15.40
4,4'-DDT	09.81	09.71	09.91	33473360	38533420	15.10
4,4'-DDE	07.79	07.69	07.89	39824390	44973880	12.90
4,4'-DDD	09.15	09.05	09.25	31682790	35349520	11.60
Methoxychlor	11.16	11.06	11.26	19564180	20203540	3.30
Heptachlor Epoxide	07.05	06.95	07.15	43444890	48450100	11.50
Heptachlor	05.31	05.21	05.41	51684250	58323760	12.80
Chlordane	07.59	07.49	07.69	43530540	48753770	12.00
Decachlorobiphenyl	15.45	15.35	15.55	33615660	35651860	6.10
Tetrachloro-m-xylene	03.38	03.28	03.48	35059760	38165960	8.90

\* - Outside of QC limits

F-VII

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10.8.





Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220325\7T23743.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220325\7T23743.D\ECD2B.CH  
 Acq On : 25 Mar 2022 15:00 Operator: sdp  
 Sample : SEQ-CCV@50ppb Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 28 12:45 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Initial Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/kg	ug/kg
System Monitoring Compounds						
1) S TCMX	3.38	4.00	1908.3E6	822.7E6	54.430	51.078
Spiked Amount	50.000	Range	43 - 129	Recovery	= 108.86%	102.16%
21) S Decachlorobiphen	15.45	17.99	1782.6E6	725.5E6	53.029	53.776
Spiked Amount	50.000	Range	42 - 136	Recovery	= 106.06%	107.55%
Target Compounds						
2) alpha-BHC	4.08	5.01	3201.8E6	1496.4E6	59.081	59.207
3) M gamma-BHC (Linda)	4.54	5.70	2931.8E6	1394.2E6	57.710	57.760
4) M Heptachlor	5.31	6.63	2916.2E6	1305.9E6	56.423	54.239
5) beta-BHC	4.67	5.85	1230.3E6	539.3E6	55.702	51.635
6) delta-BHC	4.96	6.47	2945.7E6	1353.7E6	58.682	58.157
7) M Aldrin	5.85	7.34	2592.2E6	1190.7E6	57.027	56.777
8) Heptachlor epoxi	7.05	8.66	2422.5E6	1091.0E6	55.760	54.348
9) Endosulfan I	7.87	9.60	2229.6E6	989.3E6	54.810	53.212
10) 4,4'-DDE	7.79	9.91	2248.7E6	986.1E6	56.465	56.192
11) M Dieldrin	8.40	10.29	2285.0E6	1019.9E6	55.132	55.793
12) M Endrin	8.92	11.12	2197.4E6	982.9E6	56.202	56.943
13) 4,4'-DDD	9.15	11.53	1767.5E6	837.6E6	55.787	58.201
14) Endosulfan II	9.44	11.78	1978.7E6	1009.3E6	53.483	56.120
15) M 4,4'-DDT	9.81	12.55	1926.7E6	855.5E6	57.558	59.179m
16) Endrin aldehyde	10.47	12.88	1603.7E6	807.2E6	51.512	53.141
17) Endosulfan sulfa	11.71	13.70	1842.3E6	860.5E6	52.862	51.207
18) Methoxychlor	11.16	14.62	1010.2E6	434.4E6	51.634	51.918
19) Mirex	11.30	14.97	1580.7E6	631.4E6	51.822	47.760
20) Endrin ketone	12.55	15.10	2045.6E6	862.2E6	52.646	53.129
22) L1 Chlordane (gamma)	7.30	9.11	2481.9E6	1107.8E6	56.342	55.422
23) L1 Chlordane (alpha)	7.59	9.47	2393.4E6	1063.0E6	55.648	54.126
Sum Chlordane (gamma)			4875.4E6	2170.8E6	111.991	109.547
Average Chlordane (gamma)					55.995	54.774
Sum Toxaphene (1)			0	0	N.D.	N.D.
Average Toxaphene (1)					0.000	0.000

(f)=RT Delta > 1/2 Window (#)=Amounts differ by > 25% (m)=manual int.  
 7T23743.D 80810302.M Mon Mar 28 13:11:46 2022 SS

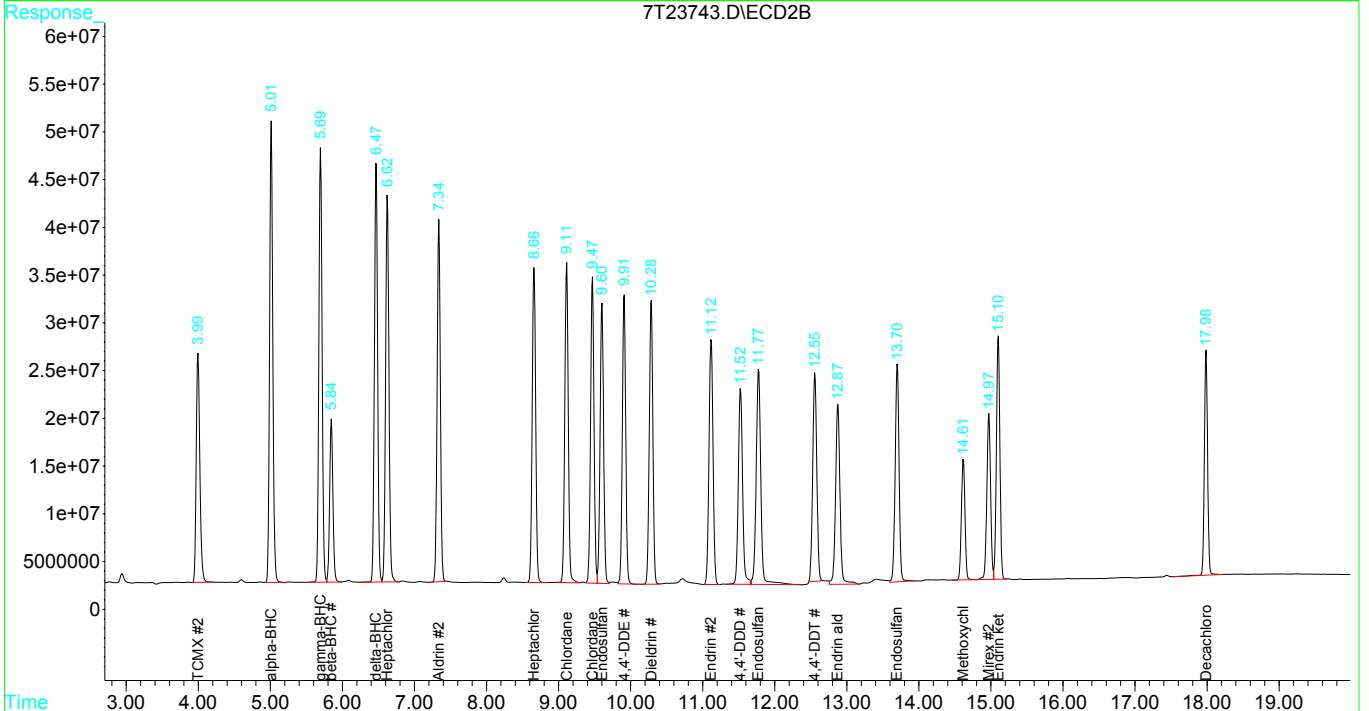
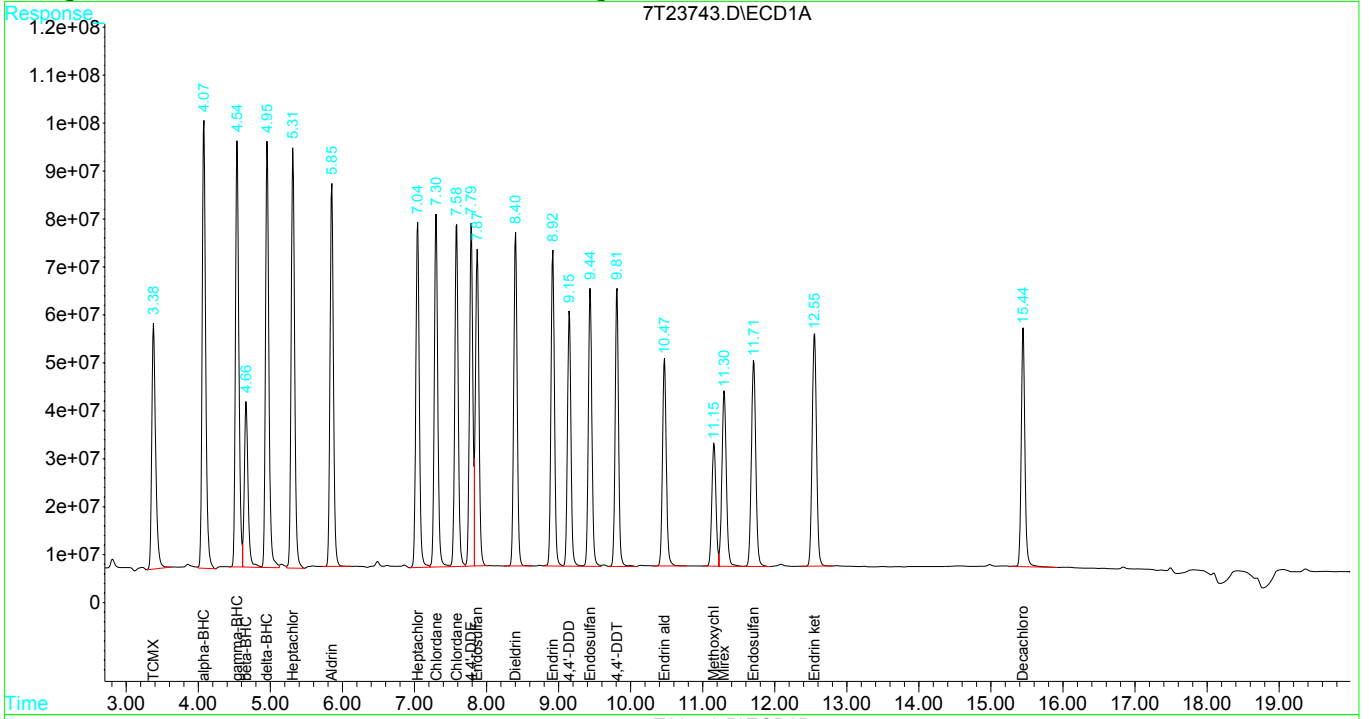
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10.8.

Quantitation Report (QT Reviewed)

Signal #1 : G:\HPCHEM\GCECD7\DATA\20220325\7T23743.D\ECD1A.CH Vial: 3  
 Signal #2 : G:\HPCHEM\GCECD7\DATA\20220325\7T23743.D\ECD2B.CH  
 Acq On : 25 Mar 2022 15:00 Operator: sdp  
 Sample : SEQ-CCV@50ppb Inst : GCECD-7  
 Misc : Multiplr: 1.00  
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e  
 Quant Time: Mar 28 12:45 2022 Quant Results File: 80810302.RES

Quant Method : G:\HPCHEM\G...\80810302.M (Chemstation Integrator)  
 Title : Pesticides by Method SW-846 8081B  
 Last Update : Wed Mar 23 16:16:30 2022  
 Response via : Multiple Level Calibration  
 DataAcq Meth : RUNPEST.M

Volume Inj. : 2ul  
 Signal #1 Phase : RTx-50 Signal #2 Phase: RTx-CLPesticides II  
 Signal #1 Info : 30M x 0.53mm x 0. Signal #2 Info : 30M x 0.53mm x 0.42um



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10.8.



AQUA PRO-TECH LABORATORIES  
Certified Environmental Testing

# GENERAL CHEMISTRY

Sesi Consulting Engineers

Work Order: 2030609

Project: 2300 Catherine St.



# ANALYSIS DATA SHEET

## General Chemistry

Client: **Sesi Consulting Engineers**  
 Project: **2300 Catherine St.**  
 Work Order: **2030609**

### General Chemistry

#### 2030609-01 (Soil) - HAP-1

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	73.7		1		03/11/22 10:31	Gravimetric

#### 2030609-02 (Soil) - HAP-2

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	72.2		1		03/11/22 10:31	Gravimetric

#### 2030609-03 (Soil) - HAP-3

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	82.1		1		03/11/22 10:31	Gravimetric

#### 2030609-04 (Soil) - HAP-4

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	73.3		1		03/11/22 10:31	Gravimetric

#### 2030609-05 (Soil) - HAP-5

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	67.1		1		03/11/22 10:31	Gravimetric

#### 2030609-06 (Soil) - HAP-6

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	76.5		1		03/11/22 10:31	Gravimetric

#### 2030609-07 (Soil) - HAP-7

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	67.7		1		03/11/22 10:31	Gravimetric

#### 2030609-08 (Soil) - HAP-8

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	78.8		1		03/11/22 10:31	Gravimetric

#### 2030609-09 (Soil) - HAP-9

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	79.9		1		03/11/22 10:31	Gravimetric

#### 2030609-10 (Soil) - HAP-10

Analyte	Units	Conc.	MDL	DF	Qual	Analyzed	Method
Percent Solids	%	71.3		1		03/11/22 10:31	Gravimetric

ND - Indicates compound analyzed for but not detected  
 J - Indicates estimated value  
 B - Indicates compound found in associated blank  
 E - Concentration exceeds highest calibration standard

D - Indicates result is based on a dilution  
 H - Indicates a Hold Time violation  
 P - Greater than 25% diff. between 2 GC columns.  
 MDL - Minimum detection limit, RL - Reporting limit

F-III

