Wellesley Country Club

Irrigation & Bunker Improvements

300 Wellesley Avenue, Wellesley, MA 02481

Issued for:

- Site Plan Review
- Design Review

WELLESLEY COUNTRY CLUB

1910

Owner/Applicant:
Wellesley Country Club
300 Wellesley Avenue
Wellesley, MA 02481

Prepared by:

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A&M PROJECT #1828-02H
December 6, 2019

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1.0 – Project Summary

The purpose of this report is to provide a detailed review of the construction management and scheduling for the proposed irrigation and bunker improvements at the Wellesley Country Club 300 Wellesley Avenue in the Town of Wellesley, MA. The proposed irrigation system is a direct replacement for the existing irrigation system. The proposed irrigation system will improve how the water is used on the course and will likely result in a reduction in irrigation water due to the increased system efficiencies. Bunker improvements include reshaping and/or expanding of existing bunkers which is part of the course's management plan.

2.0 – Existing Conditions

The project site is located at 300 Wellesley Avenue in Wellesley, MA. The course is bisected by Wellesley Avenue and is bounded to the south by the Town Line Wellesley/Needham, Brookside Road to the east, Forest Street to the west, and residential properties to the north. The Town of Wellesley identifies the locus on Assessor Map 40 Lot 1 and Map 32 Lot 2A. The Town of Needham identifies a portion of the locus as Parcel ID 199/113.0-0029-0000.0. The Sudbury transmission Aqueduct runs north to south across the site. The aqueduct is owned and operated by the Massachusetts Water Resources Authority (MWRA). The existing irrigation system is over 20 years old and is in constant need of repair and has limited control features resulting in larger than desirable irrigation zones. The Wellesley Country Club has a water withdrawal permit through MassDEP. The permit is subject to the Water Management Act and subject to annual usage reports filed with MassDEP. The irrigation system is metered and the club's allotment is 25.2 MGY or an average of 120,000 gpd on a typical irrigation season of 210 days.

Figure 1 - Google Earth 2019

3.0 – PROPOSED CONDITIONS

The applicant, Wellesley Country Club, is proposing to upgrade the existing irrigation system with a new state of the art irrigation system featuring moisture tensiometer feedback and extensive zone control. The new system will consist of larger distribution pipes (6 to 14 inches in diameter) that move the irrigation water from the two (2) pump stations across the golf course. Connected to these are the smaller (3 and 4 inch diameter) pipes that connect to the individual sprinkler heads. All pipes are made of HDPE, a strong and flexible material superior to the existing PVC pipe which becomes brittle with age.

Pipes will be installed using two methods. Most of the pipe will be installed in trenches excavated in the existing turf. The process is to first cut, remove, and save the sod. Then the trench is excavated using a narrow bucket backhoe for the larger pipe and a ditch witch for the smaller pipe. The pipe is laid in the trench without the need for any pipe bedding, the trench is backfilled, and the turf (sod) is replaced. The entire operation is completed during the same workday so that the sod can be put back in place before the roots dry out. This helps eliminate the need for replacing sod along the trench lines.

When crossing the streams on the site the large diameter distribution lines will be installed by directional drilling rather than open trench. This is being proposed for all water crossings to avoid direct impact to the waterbodies. Directional drilling involves opening small entry and receiving pits away from the resource area and using the directional drill to bore under the resource area. The pipe is then pulled through the bore hole by the directional drill. Please note that the work has been reviewed by the Wetlands Protection Committee and has resulted in an Order of Conditions.

The largest pipe (12- and 14-inch diameter) may require up to a 3-foot-wide trench. Medium sized pipe (6, 8, and 10-inch diameter) require a narrower trench. Finally, the small pipe (3 and 4 inch diameter) only requires up to a 1-foot wide trench. All the trenches are shallow because the irrigation system is winterized (blown out) each year so pipe freezing is not an issue. The system was designed with 3 different types of heads which spray in different patterns so that only the turf intended for irrigation (primarily the greens, tees, and fairways) are irrigated. The new system will increase control (reduce the size of each zone) so that watering may be accomplished more efficiently. There is no increase in irrigated acreage proposed and no increase in withdrawals are sought. In fact, the new system will likely result in a decrease in water use.

Prior to any work occurring BMP's (staked compost socks) will be installed between a trench line and the adjacent resource area. The compost socks will be installed at least 5 feet from the edge of the wetlands and will be maintained throughout system installation. The existing sod will be reused further minimizing erosion potential. Any demolition materials generated while replacing the old pipes will be trucked offsite to an approved disposal facility.

The proposed bunker modifications are illustrated on the site plan prepared by Mungeam Golf Design, Inc., which is part of the course management plan. Please refer to the site plan for a

breakdown table identifying the work being proposed and impacts associated on each hole. The intent of the modifications is to expand the applicable bunkers as part of the course play. These elements were reviewed by the Club's greens committee and the result of a study for play improvement. At each bunker, the existing sod and topsoil will be removed and relocated to the 4 general areas as designated on the site plan. The excavated materials will be used to shape landscaping berms and separation areas for play. The bunker excavations would then be top dressed with sand and manicured consistent with the upkeep of the grounds.

4.0 – Drought Management Plan – Per the WMA Permit Requirement

Implementation of a course's Seasonal Drought Management Plan is triggered by dry conditions, including either a drought declaration by the Massachusetts Drought Management Task Force or low streamflow or groundwater levels measured at a local USGS streamflow gage or groundwater monitoring well assigned to each golf course in their permit. The drought management requirements that restrict irrigation during times of drought or low streamflow/low groundwater are included in Table 11.2.

Table 11.2 – Seasonal Drought Management Plan for Golf Courses

Trigger for irrigation restrictions	Landscape & Ornamentals	Roughs	Fairways	Tees & Greens
MA Drought Advisory or streamflow/groundwater trigger in permit	No irrigation	Irrigation reduced to 50%	Irrigation reduced to 80%	Irrigation remains at 100%
MA Drought Watch	No irrigation	No irrigation	Irrigation reduced to 60%	Irrigation remains at 100%
MA Drought Warning	No irrigation	No irrigation	Irrigation reduced to 40%	Irrigation remains at 100%
MA Drought Emergency	No irrigation	No irrigation	TBD*	TBD*

*Action To Be Determined by the Governor's Emergency Proclamation

5.0 – CONSTRUCTION TRAFFIC MANAGEMENT PLAN

The construction traffic management plan (CTMP) is intended to identify, resolve and mitigate impact to local traffic resulting from the proposed the irrigation improvement project.

The construction sequence plan is intended to include:

Task	Estimated Duration (days)	Description
1	5	• Pre-construction conference with the applicant, site contractor, design engineer and interested town officials prior to the start of any work; • Stake location of new irrigation line; • Establish construction staging area.
2	130	• Disperse piping to the designated fairways; • Cut, remove, and stack the sod, adjacent to the trench; • Excavate and stockpile material adjacent to the trench; • Install the new irrigation pipe and irrigation heads; • Backfill and compact trench; • Replace sod.
3	5	• Temporarily disconnect and remove irrigation affected by proposed work.
4	10	• Perform erosion repair as necessary, remove trapped sediments from collector devices as appropriate, re-prepare and re-seed barren areas and commence turf grass maintenance.
5	10	• Oversee grow-in and establishment of turf with regular and consistent irrigation, mowing, and fertilization; • Upon establishment of suitable turf cover, commence removal of temporary erosion control devices as areas become stabilized and threat of erosion is removed.

Note: Durations are approximate.

Construction Operations:

Construction Activities: All construction activities will be completed in accordance with the Zoning regulations and requirements of Local, State and Federal regulations. Accumulated material will be disposed of by the site contractor in accordance with construction standards dependent on the material. Tanto anticipates working one hole at a time, working from locations furthest away from the pump house and moving toward the pump house in

succession. The existing system will be kept alive as we go so that the Club has water to the golf course through the old system during the installation of the new one. In some instances they may even be cross-connected for flushing purposes.

Tanto Irrigation plans on up to two crews of between 12 and 14 persons each, working in a field of trench line no more than 4 feet deep, 2 feet wide (max), with no more than 250 – 500 feet of trench open and exposed at any given time for each crew working. Any trenches opened up are closed and re-sodded by the end of the day. No excavated trench is left exposed overnight, with rare exceptions surrounding complex intersection connections requiring multiple work-days to accomplish. In these cases, weather, location, work filed protection are all considered in order to plan this work to eliminate any risk to property or person from the equation.

Construction Hours: The anticipated irrigation construction activities will take place Monday thru Saturday between the hours of 7:00 AM and 4:00 PM from April 1st to August 29th. The bunker renovation project will occur from July 1st to October 30th.

Deliveries/Truck Traffic/Parking Management: The Owner is anticipating to have all work products delivered to the site in April 2020 and will be stored in a designated lay down area located in the parking area near the tennis courts and practice range. It is anticipated that all of the required piping will be done in 6 truckloads. A construction trailer will also be located within this area. The material will then be dispersed throughout the course, temporarily located along the edges of the fairways by smaller trucks and skid steers.

Construction Personnel Parking: All construction personnel will be required to park within designated areas.

In support of this project, approximately 2 crews of 12-14 construction personnel each may be on the project site. These will range from site superintendents, to machine operators, laborers and irrigation consultants. All small construction vehicles (pickup trucks, passenger cars) shall be required to park near the lay down area.

Equipment Anticipated:

- 3-5 Rubber Track Excavators and Mini Excavators(PC-60 Max);
- 8-10 Golf-type Utility vehicles;
- 2 Turf-tired pipe trailers;
- 4 Turf-tired AG-type Utility Tractor;
- 2-3 Turf tired trenchers / rock wheels (RT-115 or smaller)
- Various small, specialized mobile equipment.

Dust and Dirt Control: The Contractor will be working within established areas, thus minimizing the creation of dust and dirt. All work will be done in a controlled manner where the contractor will be required to cut, remove, and save the sod. Then the trench is excavated using a narrow bucket backhoe for the larger pipe and a ditch witch for the smaller pipe. The pipe is laid in the trench without the need for any pipe bedding, the trench is backfilled, and the turf (sod) is

replaced. The entire operation is completed during the same workday so that the sod can be put back in place before the roots dry out and minimize the potential for any erosion and/or sediment. Roadways shall be monitoring by the site contractor and cleaned as necessary during the construction period. Site watering will be implemented as necessary to prevent windblown dust from leaving the property. No offsite import or export of material is anticipated. Excess material generated by the installation of piping shall be used by the groundskeeper to supplement other areas of the course.

Construction Phasing/Schedule: The overall construction will commence in April of 2020 if permits have been secured and is to be completed by November 2020.

Communication: The Contractor will work with the owner and the Town of Wellesley to ensure a smooth operation through the project completion.

A list of key contact personnel is being provided below.

Project Team

Owner:	Wellesley Country Club c/o Martin Ryan, General Manager 300 Wellesley Avenue Wellesley, MA 02481 781-235-7333
Irrigation Designer:	Aqua Agronomic Solutions, Inc. c/o Paul Granger P.O. Box 5532 Clinton, NJ 08809 908-730-7887
Architect:	Mungeum Cornish Golf Design c/o Mark Mungeum 195 South West Main Street Douglas, MA 01516 508-873-0103
Environmental Consultant:	Coneco Engineers & Scientists c/o Michael Toohill, PWS CE CERP 238 Littleton Road, Suite 105 Westford, MA 01886 978-656-8684
Civil Engineer:	Allen & Major Associates, Inc. c/o Philip Cordeiro, PE 10 Main Street Lakeville, MA 02347 508-923-1010
Irrigation Contractor:	Tanto Irrigation c/o William Bartels 5 North Payne Street Elmsford, NY 10523 914-347-5770
Bunker Contractor:	TBD

All additional sand required for the bunker modification will be delivered and stockpiled at the maintenance facility. The selected contractor will transport the sand to the individual holes as needed via landscape trailer attached to a tractor. All excess material will be disposed of on the course as designated on the site plan. The material will be spread and shaped into the existing landscape. Any changes to the project team above will be provided to the Town and posted onsite. It shall be a requirement of the contractor to keep onsite at all times a copy of the project approvals and permits issued by the Town and copies of all site plans, drawings, etc. referenced within those documents.

Appendix A

Site Plan Review Application
Design Review Application

ALLEN & MAJOR ASSOCIATES, INC.

APPENDIX A

SITE PLAN REVIEW APPLICATION

TOWN OF WELLESLEY MASSACHUSETTS

ZONING BOARD OF APPEALS
TOWN HALL • 525 WASHINGTON STREET • WELLESLEY, MA 02482-5992

J. RANDOLPH BECKER, CHAIRMAN
RICHARD L. SEEGEL
DAVID G. SHEFFIELD

LENORE R. MAHONEY
EXECUTIVE SECRETARY
TELEPHONE
(781) 431-1019 EXT. 2208

ROBERT W. LEVY, VICE CHAIRMAN
WALTER B. ADAMS
DEREK B. REDGATE

PROCESS SCHEDULE FOR SITE PLAN APPROVAL PROJECTS

1. Petitioner meets with Executive Secretary to discuss project. At initial meeting, petitioner is given the List of Plans, Check List, Time Line, Official Development Prospectus, and Process Schedule.

Preliminary Meetings

A. Mandatory – Design Review Board

B. Voluntary

(1). Department of Public Works

a. Petitioner arranges preliminary meeting with Town Engineer, which will include other DPW representatives. Petitioner will be prepared to discuss in detail the water, sewer, drainage, electric, parking and landscaping requirements associated with the project. Petitioner will bring preliminary engineering and landscape/parking plans to this meeting.

b. No less than Ten (10) weeks prior to the Public Hearing, the applicant will send **one** full set of plans to the Town Engineer for review by the Department of Public Works. Plans should include all requirements on the Check List. Within ten (10) days of receipt of the plans, the Department of Public Works will send a letter of review to the petitioner, summarizing comments and concerns and issues to be addressed.

(2). Wetlands Protection Committee

a. If the location of the construction is within a Resource Area, a Water Supply Protection District or a Flood Plain District, the petitioner must obtain all necessary approvals and Orders of Conditions at least ten (10) days prior to the date of the Public Hearing on the petition.

(3). Public Safety Officer – Fire Department

(4). Board of Health

Process Schedule Continued

1. No less than six (6) weeks prior to Board of Appeals Public Hearing, the applicant shall submit twelve (12) copies of the application for Site Plan Review, Development Prospectus, the Check List and any supplemental materials, twelve (12) large sets of all required plans & six (6) sets of 11 x 17 plans, incorporating all DPW comments, to the office of the Board of Appeals.

2. The Executive Secretary shall time-stamp two (2) copies of all materials and plans submitted in the Town Clerk's office. Individual packages of all plans and materials with a cover letter shall be distributed to the Planning Board, Design Review Board, Wetlands Protection Committee, Town Engineer, Board of Health, Fire Chief, Police Chief and Municipal Light Plan, for review and recommendations.

3. The Board of Appeals will automatically continue the scheduled Site Plan Approval Public Hearing, if all revised plans and/or additional requested materials have not been approved by all departments no less than ten (10) days prior to the hearing.

4. Public Hearing on petition for Site Plan Approval

   If the above requirements have not been completed, or if the Board requests additional information or plan revisions at the initial hearing, the Board may continue the hearing for one month.

5. Decision

   The decision shall be issued between three to four weeks following the last Public Hearing.

6. General Comments

   If the project requires a Special Permit for a Project of Significant Impact issued by the Planning Board, the Preliminary steps in the process may be undertaken concurrent with the processing of the Special Permit. However, no submission shall be made to the Board of Appeals until the Special Permit has been granted and the twenty-day appeal period has expired.

ALL WETLANDS PROTECTION ISSUES (DETERMINATION OF NEGATIVE APPLICABILITY OR ORDER OF CONDITIONS) MUST BE RESOLVED AND SUBMITTED TO THE BOARD BEFORE THE ZBA PUBLIC HEARING.

THE BOARD RECOMMENDS THAT THE PETITIONER REVIEW THE ZONING BOARD OF APPEALS RULES AND REGULATIONS.

TOWN OF WELLESLEY MASSACHUSETTS

ZONING BOARD OF APPEALS

TOWN HALL • 525 WASHINGTON STREET • WELLESLEY, MA 02482-5992

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Special Permit Granting Authority
Wellesley Town Hall
Wellesley, MA 02482

Date:_____

ZBA Number:_____

Pursuant to the provisions of Section 16A, subparagraph_____, and Section_____of the Zoning Bylaw, the undersigned hereby requests Site Plan Approval for the construction of Irrigation Improvement Project

Located at 300 Wellesley Avenue

Within a SR30: Single Residence 30 and Water Supply Protection District (s).

The following plans are submitted:

1. Existing Site Features Plan Plan # V-101 by A&M (Title Block Number)
2. Site Development Plan Plan # n/a
3. Plot Plan Plan # n/a
4. Grading & Drainage Plan Plan # n/a
5. Utilities Site Plan Plan # 1 by Aqua Agronomic Solutions, Inc.
6. Landscaping/Parking Plan Plan # n/a
7. Architectural Plans Plan # n/a through _____
8. Subsurface Conditions Plan Plan # n/a
9. Utilities Detail Plans Plan # n/a through _____
   a. Structure Details Plan # n/a
   b. Plumbing Details Plan # n/a
   c. Electric Details Plan # n/a

(Ten full sized copies of each plan, seven 11inch by 17 inch copies of each plan, a check in the amount of $2500.00 payable to the Town of Wellesley, and a check in the amount of _____ payable to the Town of Wellesley Fire Department (for Site Plan Approval without PSI).

OWNER OF RECORD: Wellesley Country Club c/o Martin Ryan (General Manager)
ADDRESS: 300 Wellesley Avenue Wellesley, MA 02481
TELEPHONE NUMBER: 781-235-7333

PETITIONER:(If not Owner, relationship to owner)_____

ADDRESS:_____
TELEPHONE NUMBER:_____

PROJECT CONTACT PERSON: Philip Cordeiro, PE - Allen & Major Associates, Inc.
ADDRESS: 10 Main Street Lakeville, MA 02347
TELEPHONE NUMBER: 508-923-1010 FAX NUMBER: 508-923-6309

TOWN OF WELLESLEY

ZONING BOARD OF APPEALS

SITE PLAN APPROVAL REVIEW
PLANS AND SUBMITTAL CHECKLIST

Plans and submittals for site plan approval review are submitted to the Department of Public Works for its review and approval on behalf of the Zoning Board of Appeals shall contain the items listed in this checklist. Electric plans will be reviewed by representatives of the Wellesley Municipal Light Plant.

PLANS		CHECK
1. EXISTING SITE FEATURES PLAN		
a)	Location, type, size or dimension of existing trees and rock masses	n/a
b)	Surface drainage and topography with one foot contours	x
c)	Property lines, zoning districts, adjacent roadways, historical or archeological features	x
d)	Rights of way and easements (temporary and permanent)	x
e)	Wetlands and floodplains	x
f)	Adjacent public, footpaths, trails and other natural or man-made features such as walls and fences	x
g)	Plan to be Scale 1" = 40' or larger	x
h)	Plan must be stamped, dated and signed by a Registered Land Surveyor in the Commonwealth of Massachusetts	x
2. SITE PLAN DEVELOPMENT		
a)	Building locations, finish floor elevations at basement and first floor	n/a
b)	Grading detail for entire site with existing and proposed contours	n/a
c)	Existing and proposed curb cuts, design as per Town Policy by Board of Selectmen dated 5/15/73	n/a
d)	Property lines and easement lines	n/a
e)	All elevations on the Town of Wellesley datum base	n/a
f)	North directional arrows shall be provided and point due north	n/a
g)	Plan must be stamped, dated and signed by a Registered Architect, Registered Land Surveyor or Professional Engineer in the Commonwealth of Massachusetts	n/a
3. PLOT PLAN		
a)	Existing buildings and structures	n/a
b)	Proposed structure(s) including all dimensions and distances from front, rear and side property lines	n/a
c)	Area of lot or lots included in the project	n/a
d)	Zoning district lines and portion of lot in different zoning district (if applicable)	n/a
e)	Names of all abutters as they appear on the most recent tax list	n/a
f)	The location of all permanent survey monuments	n/a
g)	Not less than 3 permanent benchmarks, preferably triangulated, shall be shown	n/a
h)	Plan must be stamped, dated and signed by a Registered Land Surveyor in the Commonwealth of Massachusetts	n/a

4. GRADING AND DRAINAGE PLAN

a)	Existing and proposed contours in one foot intervals of elevation	n/a
b)	Location of existing and proposed storm drainage structures	n/a
c)	Profile showing proposed utilities in relation to the ground surface	n/a
d)	Erosion control measures such as haybales and siltation fencing	n/a
e)	Plan must be stamped, dated and signed by a Registered Professional Engineer in the Commonwealth of Massachusetts	n/a

5. UTILITIES SITE PLAN

a)	Building location and elevations	n/a
b)	Existing utilities on project site and in abutting street	n/a
c)	Location, depth, size, (slope where applicable) and material of:	x
	• Water service and hydrants	x
	• Gas service	n/a
	• Sanitary sewer connection (pipe to be SRD-35 PVC, green)	n/a
	• Storm drain installations	n/a
	• Electric service	n/a
	• Fire alarm connection	n/a
	• Telephone service	n/a
d)	Number utility structures such as manholes and catch basins for identification purposes	n/a
e)	Detail specifications for installation of all utilities including street pavement restoration as per current DPW standards	n/a
f)	Flow direction arrows on drain and sewer lines	n/a
g)	Plan must be stamped, dated and signed by a Registered Professional Engineer in the Commonwealth of Massachusetts	n/a

6. LANDSCAPING/PARKING PLAN

a)	Proposed landscaping of property	n/a
b)	Size, type and location of proposed plant materials with botanical names	n/a
c)	Consider the impact for plantings at their maturity size as relates to sight distances	n/a
d)	Landscaping plan shall be coordinated with the grading plan	n/a
e)	Tree planting and shrub planting details	n/a
f)	Hardscape details such as walkways and patios	n/a
g)	See attached listing of undesirable plants as prepared by the Town Horticulturalist	n/a
h)	Plan must be stamped, dated and signed by a Registered Landscape Architect in the Commonwealth of Massachusetts	n/a
i)	No bushes or trees of any kind shall be planted within 10 feet in any direction of a Fire Department connection or a Master Fire Alarm box. Connections include hydrants, standpipes and sprinkler feeds on the outside of buildings.	n/a
j)	Parking lot plans shall include dimensions of parking spaces, maneuvering aisles, islands, turning radii, percentage of landscaped open space, percentage of interior landscaping, appropriate number of handicapped parking spaces, and directional flow arrows. All parking spaces shall be numbered	n/a

7. ARCHITECTURAL PLANS

a)	Proposed floor plans	n/a
b)	Elevations of all sides of all buildings	n/a
c)	Sections identifying type and exterior finish of proposed buildings	n/a
d)	Plan must be stamped, dated and signed by a Registered Architect in the Commonwealth of Massachusetts	n/a

8. SUBSURFACE CONDITIONS PLAN

a)	Boring location with boring numbers	n/a
b)	Boring logs	n/a
c)	Ledge encountered and depth	n/a
d)	Water encountered and depth	n/a
e)	Percolation test info (if applicable)	n/a

9. UTILITIES DETAIL PLAN

		n/a
a)	Structure details	n/a
	• Sanitary sewer manholes	n/a
	• Drain manholes, detention structures, etc.	n/a
	• Catchbasins (gas and oil separators required at parking lots)	n/a
	• Outside grease trap if restaurant is proposed	n/a
b)	Plumbing details	n/a
	• Water service size and entrance location	n/a
	• Water meter size, location and piping detail	n/a
	• Size and location of water service backflow protection devices (if applicable)	n/a
	• Sanitary sewer size and entrance location with elevations	n/a
	• Size and location of sanitary sewer check valves (if applicable)	n/a
	• Oil/water separators and MDC gas traps (if applicable)	n/a
	• Pumping equipment (if applicable)	n/a
c)	Electrical Details	n/a
	• Location service entrance	n/a
	• Size of Service	n/a
	• Meter location and switchgear arrangement	n/a
	• Provision for future expansion	n/a
	• Transformer size and facilities for pad or vault room	n/a
	• Data including load requirements	n/a

GENERAL PLAN COMMENTS

a)	All plans must be stamped, signed and dated by a Registered Professional Engineer, or Architect in the Commonwealth of Massachusetts responsible for the particular plan's contents	x
b)	Title Blocks shall provide the name of project, job site location, architects and engineer responsible for plan contents, date and plan scale	x
c)	All plans must be numbered and titled	x
d)	All dates of revisions shall be included	x
e)	Provide retaining wall design details	n/a
f)	Provide locus plan drawn at a scale of 1" = 500' showing the relation of the project to adjoining properties within a radius of ¼ mile	x
g)	The cover sheet shall provide the names, mailing addresses and phone numbers of the land owner, building owner, architects and engineers and project contact person, and Table of Contents	n/a
h)	Location of all mechanical systems must be shown	n/a

SUBMITTALS

a)	Drain calculations showing capacities of the existing and proposed drain systems	n/a
b)	Runoff calculations for the 10, 25 and 100 year storm event for storm drains, leaching basins or holding areas	n/a
c)	Post development rate of peak runoff less than pre-development rate of peak runoff	n/a
d)	Information showing that the DEP Stormwater Management Standards will be met	n/a
e)	Operation and maintenance plan for drainage system	n/a
f)	Evaluation of existing municipal systems capacities	n/a
g)	Quantification and documentation of infiltration/inflow reduction measures	n/a
h)	Quantification and documentation of water conservation measures	n/a
i)	Written statement from a Registered Professional Engineer in the Commonwealth of Massachusetts regarding the adequacy of the water flow for the fire protection system	n/a
j)	Construction area to be fenced	n/a
k)	Traffic Management Plan during construction period	x
l)	Area of construction worker and equipment parking	x
m)	Materials staging area	x

UNDESIRABLE PLANTS FOR LANDSCAPE DESIGNS SUBMITTED WITHIN THE TOWN OF WELLESLEY

TREES:		
*	*Acer platanoides*	Norway Maple
*	*Acer pseudoplatanus*	Sycamore Maple
	Acer saccharinum	Silver Maple
*	*Ailanthus altissima*	Tree-of-Heaven
	Elaeagnus angustifolia	Russian-olive
	Morus alba	White Mulberry
*	*Phelodendron amurense*	Amur Cork-tree
	Populus alba	White Poplar
	Pyrus c. 'Bradford'	Bradford Pear
	Pyrus c. 'New Bradford'	New Bradford Pear
*	*Robinia pseudoacacia*	Black Locust
	Tsuga canadensis	Eastern Hemlock
	SHRUBS:	
	Alnus glutinosa	Common Alder
*	*Berberis thunbergii*	Japanese Barberry
*	*Berberis vulgaris*	Common Barberry
*	*Elaeagnus umbellata*	Autumn-olive
*	*Euonymus alatus*	Burning Bush
*	*Frangula alnus*	Glossy Buckthorn
*	*Ligustrum obtusifolium*	Border Privet
	Ligustrum sinese	Chinese Privet
	Ligustrum vulgare	Common Privet
*	*Lonicera maackii*	Amur Honeysuckle
*	*Lonicera morrowii*	Morrow Honeysuckle
*	*Lonicera tatarica*	Tatarian Honeysuckle
*	*Lonivera x bella*	Bell's Honeysuckle
*	*Rhamnus cathartica*	Common Buckthorn
*	*Rosa multiflora*	Multiflora Rose
	VINES:	
*	*Ampelopsis brevipedunculata*	Porcelain Ampelopsis
*	*Celastrus orbiculatus*	Chinese Bittersweet
*	*Cynanchum spp.*	Swallow-worts
*	*Humulus japonicas*	Japanese Hops
*	*Lonicera japonica*	Japanese Honeysuckle
*	*Polygonum perfoliatum*	Mile-a-minute Vine
	Wisteria sinensis	Chinese Wisteria
	ORNAMENTALS:	
*	*Aegopodium podagraria*	Goutweed
*	*Alliaria petiolate*	Garlic-mustard
*	*Iris pseudacorus*	Yellow Flag Iris
*	*Lythrum salicaria*	Purple Loosestrife
*	*Microstegium vimineum*	Japanese Stilt-grass
*	*Phalaris arundinaceae*	Ribbon Grass
*	*Pragmites australis*	Common Reed
*	*Polygonum cuspidatum*	Japanese Knotweed
	Utgica dioica	Stinging Nettle
	AQUATICS:	
*	*Hydrilla verticillata*	Hydrilla
*	*Myriophyllum spp.*	Water Milfoils
*	*Trapa natans*	Water-Chestnut

* Indicates species listed *A Guide to Invasive Plants in MA*

TOWN OF WELLESLEY MASSACHUSETTS

ZONING BOARD OF APPEALS

TOWN HALL • 525 WASHINGTON STREET • WELLESLEY, MA 02482-5992

J. RANDOLPH BECKER, CHAIRMAN
RICHARD L. SEEGEL
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LENORE R. MAHONEY
EXECUTIVE SECRETARY

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WALTER B. ADAMS
DEREK B. REDGATE

TELEPHONE
(781) 431-1019 EXT. 2208
TOWN OF WELLESLEY

OFFICIAL DEVELOPMENT PROSPECTUS

Applicable to Major Construction Projects
Submitted Under Section XVIA of the Zoning Bylaw
And Comprehensive Permit Projects Submitted
Under Chapter 40B

Date: _____

Year/Number: _____

I. IDENTIFICATION

Petitioner: Wellesley Country Club c/o Martin Ryan (General Manager)

Address: 300 Wellesley Avenue Wellesley, MA 02481

Telephone: 781-237-7333

Land Owner of Record: Wellesley Country Club

Location of Property: 300 Wellesley Avenue

Proposed Use of Property: Golf Course

Zoning Districts: (Including all overlay districts) SR30: Single Residence 30, Water Supply Protection District

Are any other special permits or variances, other than Site Plan Approval required for this project? Yes X_____ No _____

If yes, what is required? Special Permit Construction in the Water Supply Protection District

II. DESCRIPTION

Describe in detail the plan to be executed under the appropriate categories below

1. Land Area 149 +/- acres (138 ac Wellesley + 11 ac Needham)

2. Square footage of proposed construction footprint 0

3. Square footage of existing building footprint >50,000 (multiple buildings)

4. Square footage of total structure footprint 0

5. Total floor area of existing building >50,000 (multiple buildings)

6. Total floor area of proposed construction 0

7. Total floor area after proposed construction completed same (no change)

8. Floor area ratio: (Commercial)

9. Number of Buildings 0

10. Number of Stories of each Building 0

11. Height of each Building 0

12. Number of Parking Spaces: (Existing/Proposed)

Standard 348 / 0 Compact _____/___ Handicapped 13 / 0

Covered _____/_____ Open _____/_____

Total (Existing and proposed) 348 existing / 0 proposed

Total Number Required No requirement per Zoning, no changes

13. Number of handicapped sidewalk curb cuts provided 10 existing

14. Lot coverage in square feet (%)

	Before	After
1) Buildings	(1.2%)	(1.2%)
2) Drives & Parking	(3.2%)	(3.2%)
3) Other uses (identify uses and coverage)	(n/a)	(n/a)

15. Open Space

1) Landscaped area	(95.9%)	(95.9%)
2) Natural (i.e. woods, fields)	(95.9%)	(95.9%)
3) Recreational	(95.9%)	(95.9%)

A. Residential Construction N/A

1. Number of Dwelling Units
   Efficiency_____ One Bedroom_____ Two Bedroom_____
   Three Bedroom_____ Other_____

2. How many units will be provided with handicapped access to bathrooms, toilets, entrances, egresses, etc.? _____

3. Density in square feet of land per dwelling unit.
   Existing _____ Proposed _____

4. Density in square feet of land per person:
   Existing _____ Proposed _____

III. TRAFFIC IMPACT ANALYSIS AND DATA N/A
(Explain basis for data entered)

If, as a result of the proposed construction, the following conditions will exist, Questions 1-5 must be answered:

a. If the floor area of the building exceeds 10,000 sf; or

b. If 50 or more vehicle trips will be generated by the completed project in any single hour of the day.

1. Projected traffic generation of proposed new development:

a. Peak Day	In	Out	Total
24-Hour	_____	_____	_____
Am Peak Hour	_____	_____	_____
PM Peak Hour	_____	_____	_____

b. Typical or Average Day			
24-Hour	_____	_____	_____
Am Peak Hour	_____	_____	_____
PM Peak Hour	_____	_____	_____

2. Current two-way traffic flows on frontage street(s):

	24 Hour	AM Peak Hour	PM Peak Hour
Street _____	_____	_____	_____
Street _____	_____	_____	_____

3. Data compiled by: _____

4. Date of data compilation: _____

5. Comment on adequacy of drive entrances & exits with respect to sight distance and other traffic operations considerations on frontage street(s)

Locations through which 30 or more vehicles approach from a single direc in any single hour of the day.
(List intersections and operational problems):

_____

_____

List possible hazardous pedestrian and bicycle crossings:

_____

6. Has a separate Traffic Study been submitted? Yes_____ No_____

IV. PUBLIC UTILITIES - (Quantitative, state basis for data entered)

A. Estimated water consumption 120,000 irrigation gal/day

B. Number of Fire Hydrants - existing within 200 ft 0 Proposed 0

C. Estimated discharge to sewer system 0 gal/day

D. Sewer Disposal - will any proposed on-site individual sewage disposal systems be designed to receive more than 110 gallons of sewage per quarter acre per day? Yes_____ No x

E. Refuse disposal 0 lbs. or tons/day

1. Proposed method of handling _____

2. What provisions will be made to facilitate the recycling of solid waste? _____

F. Service Voltage N/A Service Amperage N/A

1. Estimated peak electrical consumption _____kw

a. Heating Season _____kw b. Cooling Season _____kw

2. Estimated annual electric energy consumption _____kw

3. Three Phase Service _____ Single Phase Service _____

G. Are energy efficient appliances to be used? N/A

H. What R-Factors will be used in insulation and glazing for walls and ceilings? N/A

I. What energy source will be used for heating water?
Electric N/A Gas N/A Fuel Oil N/A Other N/A

J. Will electric resistance heating or heat pumps be used? Yes____ No x____

K. Will the facility include an emergency electric generator?

Yes____ No x____

If YES, would you be willing to run it to reduce your peak load?

Yes____ No____

V. FIRE PROTECTION

A. *Fire flow presently available at site N/A

B. *Total floor area of building (Largest single building if more than one building) N/A

C. Type of Building Construction N/A

D. *Required fire flow for building (Maximum required for a single building if more than one building) N/A

E. *If required fire flow (D) exceeds available fire flow (A), describe plans to provide required fire flow (D)

N/A

F. Describe access for fire apparatus to building (s) N/A

*Written statement indicating these figures signed by a registered professional engineer must accompany submittal.

VI. ENVIRONMENTAL IMPACT

A. What percentage of the property is Wetlands _____
Floodplains _____

Will either be altered as a result of the project? No

B. Will the proposed development contribute in any way to pollution of groundwater, surface water, or waterway: Yes____ No x____

Oil____ Salt____ Chemicals____ Other____

Explain

Describe proposed measures to eliminate or minimize such pollution:

_____

_____

C. Does the proposed development involve storage of any of the following materials above or below the ground?

_____ deicing chemicals or other related materials
_____ commercial fertilizers and other related materials
_____ hazardous materials
_____ liquid petroleum products

If YES to any of the above, list specific materials to be stored:

_____

_____

D. Impact on surface drainage

1a. Current rate of peak runoff 18.90 (100-yr) cubic ft/second
b. Current volume of runoff 2.6 ac-ft (100-yr) cubic feet or acre-feet

2a. Post-development rate of peak runoff No change cfs
b. Post-development volume of runoff No Change cubic feet or acre-feet

(Design storm and rainfall intensity should be cited for #1 & #2)

3. Describe measures to eliminate or minimize any increase in rate of runoff N/A

_____

4. Might the project result in significant changes in existing drainage patterns? Will any abutting or other property be adversely affected by the changes? N/A

_____

E. Does the proposed structure include installation of floor drains?
Yes____ No X____ If YES, how many? ____

F. Will the project affect the condition, use, or access to any existing public open space or recreation area? If so, how?

N/A

_____

G. Does the proposed development involve outside lighting? Yes____No^{x}____
if YES, state height of lighting fixtures _____

Will the outside lighting shine directly on abutting premises?
Yes____No____

If YES, explain

_____

Describe proposed steps to minimize this impact _____

_____

H. Might any site or structure of historic or archeological significance be affected? Yes____No^{x}____

Describe _____

I. Will the project require the removal of any street trees protected under M.G.L. Ch. 87? Yes____No^{x}____
If YES, how many?_____

J. Will the project involve blasting or pile driving? Yes____No^{x}____

1. What is the approximate volume of the material to be removed?

_____

Where will this material be disposed? _____

K. Is an Environmental Notification Form required to be filed under M.G.L. Ch. 30, Section 61-62H, the Mass. Environmental Policy Act?
Yes____No^{x}____

VII. IMPACT OF WATER SUPPLY

A. Will the project result in an increase of 10,000 square feet or more of impervious area within a Water Supply Protection District defined by Section XIVE of the Zoning Bylaw? Yes____No^{x}____

If so, does it satisfy the design and operation standards of Section XIVE? Yes____No____

B. Will the project result in finished exterior grades lower than the existing grade and less than 5 feet of soil overburden above the maximum ground water elevation within a Water Supply Protection District? Yes____No^{x}____

C. Will catch basins be installed? Yes____No^{x}___
If so, how many? _____

Do catch basins presently exist? Yes^{x}___No____
If so, how many? _____

Are catch basins fitted with oil and grease traps? Yes____No____
How many? Existing _____ Proposed _____

D. Will water saving appliances be used or water conservation devices be used in all plumbing? Yes____No^{x}___

VIII. FINANCIAL IMPACT

A. Estimated Building Permit Valuation N/A

B. Estimated assessed value 25.7 million (per assessor cards)

TOWN OF WELLESLEY MASSACHUSETTS

ZONING BOARD OF APPEALS
TOWN HALL • 525 WASHINGTON STREET • WELLESLEY, MA 02482-5992

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ROBERT W. LEVY, VICE CHAIRMAN
WALTER B. ADAMS
DEREK REDGATE

Date: _____ ZBA: _____

Petition for:	Residential Fee		Commercial & Municipal Fee	
Variance		$200		
Special Permit		$200	X	$500
Special Permit/Findings		$200		
Special Permit Renewals		$150		
Signs				$300
Site Plan Approval without PSI			X	$2,000 & Fire Department Consulting Fee
Site Plan Approval with PSI				$3,500
Appeals		$200		$300
Comprehensive Permit				$2,000
Publication & Mailing Fees/All Petitions		$25		$25
Petitioner assumes all costs for Peer Review				

Property Location: 300 Wellesley Avenue Zoning District: SR30 Single Residence 30

Property located in a:

		Yes		No
Historic District			X	
Wetlands Protection Area			X	
Water Supply Protection District	X			

Applicable Section(s) of the Zoning Bylaw: XVIA

Explanation of Request: Major Site Plan approval for upgrades to the existing irrigation system. Special Permit for construction within the Water Supply Protection District.

Requested Relief:

	Lot Area		Front Yard Depth (Street Setback)
	Lot Coverage		Side Yard Width (Side Line Setback)
	Frontage		Rear Yard Depth (Rear Line Setback)
	Front Yard Width		Other

OWNER OF PROPERTY: Wellesley Country Club

MAILING ADDRESS: 300 Wellesley Avenue Wellesley, MA 02481

PHONE: WORK: 781-235-7333 HOME:

SIGNATURE OF OWNER:

PETITIONER (If different than Owner): Wellesley Country Club c/o Martin Ryan (General Manager)

MAILING ADDRESS: 300 Wellesley Avenue Wellesley, MA 02481

PHONE: WORK: 781-235-7333 HOME:

ZONING BOARD OF APPEALS
SITE PLAN SUBMITTAL
TIMELINE

PRELIMINARY MEETING WITH DPW
(Preliminary Engineering & Landscape Plans)

OTHER MEETINGS AS REQUIRED WITH:
DRB, MLP, FIRE DEPT., WPC & BOH

ONE FULL SET OF ENGINEERING & LANDSCAPE PLANS TO DPW	**10 WEEKS PRIOR TO HEARING**
DPW RESPONSE TO APPLICANT ON PLANS	**10 DAYS AFTER RECEIPT OF PLANS**
13 COPIES OF SUBMITTAL TO THE ZBA	**6 WEEKS PRIOR TO HEARING**
PLANS MUST BE APPROVED BY DPW OR ZBA HEARING CONTINUED	**10 DAYS PRIOR TO HEARING**
ZBA HEARING	

DESIGN REVIEW APPLICATION

TOWN OF WELLESLEY
DESIGN REVIEW BOARD
APPLICATION FOR DESIGN REVIEW

WELLESLEY DESIGN REVIEW BOARD
525 Washington Street • Wellesley, MA 02482
781-431-1019 ext. 2232 • Fax 781-237-6495

application submission date:_____

Part A.
1. Address of Project 300 Wellesley Avenue

2. Type of Project: ☐PSI ☑Major ☐Minor ☐Antenna: By Right ☐Antenna: Special Permit

Part B. I hereby certify that the information on this application is correct and understand that all applications are subject to conformance with the Town of Wellesley Zoning Bylaw and review by the Wellesley Design Review Board.

Name of Property Owner/Applicant Wellesley Country Club c/o Martin Ryan (General Manager)

Address 300 Wellesley Avenue Wellesley, MA 02481 Phone 781-235-7333 Email marty@wellesleycc.com

Signature

Name of Agent for Applicant Wellesley Country Club c/o Martin Ryan (General Manager)

Address 300 Wellesley Avenue, Wellesley, MA Phone 781-235-7333 Email marty@wellesleycc.com

Signature

Part C. The following materials are required on file to make the application complete and before a review date is set.

For all projects (9 sets):
Written description of proposed change.
Written description of materials exposed to view.
Color photographs of the existing building and adjacent buildings.
Scaled elevation drawings (see details below).
Landscape and grading plan showing all improvements
Plan showing outdoor lighting & signage.

Major Construction & PSI should also include:
Scaled site plan.
A three-dimensional model of the project.

Scaled site plans should show the following:
Existing and proposed boundary lines including lot dimensions and area.
Location of all existing and proposed structures.
Location of existing and proposed driveways, parking areas, handicapped ramps & all site improvements.
Location of zone lines and existing zoning district.
Layout of all parking spaces, including dimensions, total number (standard, compact, & handicapped).
Location of all open space including existing and proposed landscaped areas (show all major trees including street trees).
Details of landscaping indicating the types and size of trees and shrubs to be planted.

Scaled elevation drawings should show the following:
Details of major architectural elements.
Samples of materials to be used.
Dimensions of building/addition (height, width, and length).
Any mechanical equipment on roof.

Required application fee is $150 for minor construction and by-right antenna projects and $300 for major construction, PSI, and special permit antenna projects. All checks made payable to "Town of Wellesley."

Part D. To be completed by Design Review Board staff.

Comments

DRB ___ -- ___ Hearing Date _____

Appendix B

Wellesley Abutters List

Needham Abutters List

ALLEN & MAJOR ASSOCIATES, INC.

APPENDIX B

WELLESLEY ABUTTERS LIST

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
Comeau St. 24-70	Commonwealth of Massachusetts DCR/MWRA	251 Causeway St. Suite 600 Boston, MA 02114
408 Wellesley Ave. 25-1	White, Robert E	408 Wellesley Avenue Wellesley, MA 02481
410 Wellesley Ave. 25-2	Balanda, Francis J, Jr	414 Wellesley Avenue Wellesley, MA 02481
198 Oakland St. 31-11	Murphy, Matthew & Zizic, Kristine	200 Oakland Street Wellesley, MA 02481
200 Oakland St. 31-12	Murphy, Matthew & Zizic, Kristine	200 Oakland Street Wellesley, MA 02482
200 Brookside Rd 31-19	Town of Wellesley Water Department	20 Municipal Way Wellesley, MA 02481
185 Oakland St. 31-20	Town of Wellesley Water Department	20 Municipal Way Wellesley, MA 02481
84 Standish Rd 31-4	Daneschvar, Homayoun & Seghatoleslami, Nasim	84 Standish Road Wellesley, MA 02481
182 Oakland St. 31-5	Fotiadis, Konstantinos & Efi	182 Oakland Street Wellesley, MA 02481
186 Oakland St. 31-6	McKay, Dennis L & Pace Susan A	186 Oakland Street Wellesley, MA 02481
190 Oakland St. 31-7	House, Deryle & Beachell, Jennifer	190 Oakland Street Wellesley, MA 02481
194 Oakland St. 31-8	Greenwood, Alan G & Steensma, Minke Cornelia	194 Oakland Street Wellesley, MA 02481
196 Oakland St. 31-9	Gifford, Carl C & Carolyn S	196 Oakland Street Wellesley, MA 02481

Donna L. McCabe
Chief Assessor
11-12-2019

ownership
thru Sept 30, 2019

Town of Wellesley
Abutters List

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

Conserv. Commission (300 ft)

Property Location	Owner of Record	Mailing Address
101 Brookside Rd 32-2	Wellesley Country Club	300 Wellesley Avenue Wellesley, MA 02481
392 Wellesley Ave. 32-3	Sagan, Robert M & Helen B	392 Wellesley Avenue Wellesley, MA 02481
396 Wellesley Ave. 32-4	Doyle, Vida A & Doyle, John M	396 Wellesley Avenue Wellesley, MA 02481
400 Wellesley Ave. 32-5	Kumar, Vinay & Chandhok, Bela	400 Wellesley Avenue Wellesley, MA 02481
Wellesley Ave. 32-6	Commonwealth of Massachusetts DCR/MWRA	251 Causeway St. Suite 600 Boston, MA 02114
142 Oakland St. 38-17	Corcoran, Kathleen M & Jones, Walter S	142 Oakland Street Wellesley, MA 02481
144 Oakland St. 38-18	Fox, Bryan Joseph & Jodi Kristin	144 Oakland Street Wellesley, MA 02481
148 Oakland St. 38-19	Knox, Kenneth B & Neal, Megan C	148 Oakland Street Wellesley, MA 02481
150 Oakland St. 38-20	Foster, D Thorpe & Foster, Trina P, Trustees	150 Oakland Street Foster Oakland Realty Trust Wellesley, MA 02481
152 Oakland St. 38-21	Richardson, John M & Sibley, Ellen S	152 Oakland Street Wellesley, MA 02481
162 Oakland St. 38-22	Youngen, Douglas & Lynn	162 Oakland Street Wellesley, MA 02481
166 Oakland St. 38-24	McNamara, Kerry M, Jr & McNamara, Margaret T	166 Oakland Street Wellesley, MA 02481

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
170 Oakland St. 38-25	Tang, Min & Gao, Guiping	170 Oakland Street Wellesley, MA 02481
178 Oakland St. 38-26	Koenig, Aaron M & Erica S	178 Oakland Street Wellesley, MA 02481
85 Standish Rd 38-27	Sheridan, Pamela J, Trustee Pamela J Sheridan Family Trust	85 Standish Road Wellesley, MA 02481
79 Standish Rd 38-28	Arbet-Engels, Christophe & Arbet-Engels, Laurie Karen	79 Standish Road Wellesley, MA 02481
179 Oakland St. 38-41	Wang, Hui & Zhao, Fengjun	179 Oakland Street Wellesley, MA 02481
175 Oakland St. 38-42	Wofford, Jimmy A & Solomon, Amy	175 Oakland Street Wellesley, MA 02481
167 Oakland St. 38-43	Weiser, Leslie P & Guerriero, Roxanne	167 Oakland Street Wellesley, MA 02481
161 Oakland St. 38-44	Landers, David O & Laurel F	161 Oakland Street Wellesley, MA 02481
151 Oakland St. 38-45	Barrack, William P & Barrack, Katherine W	151 Oakland Street Wellesley, MA 02481
70 Windsor Rd 39-1	Roberts, Kenneth D, Trustee Kenneth D Roberts Revocable Trust	72 Windsor Road Wellesley, MA 02481
58 Lincoln Rd 39-10	Somerville, Kurt F, Trustee Lincoln 58 Realty Trust	68 Lincoln Road Wellesley, MA 02481
68 Lincoln Rd 39-11	Prague & Somerville Trustees Parizeau Wellesley Realty Trust	75 State St., 16th Floor c/o Hemenway & Barnes LLP Boston, MA 02109
69 Windsor Rd 39-12	Savarese, James & Eileen R	69 Windsor Road Wellesley, MA 02481

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
70 Lincoln Rd 39-14	Town of Wellesley Tax Title	525 Washington St. c/o Treasurer's office Wellesley, MA 02482
72 Windsor Rd 39-2	Roberts, Kenneth D, Trustee Caroline D Roberts Marital Trust	72 Windsor Road Wellesley, MA 02481
76 Windsor Rd 39-3	Roberts, Kenneth D, Trustee Kenneth D Roberts Revocable Trust	72 Windsor Road Wellesley, MA 02481
67 Lincoln Rd 39-4	Prague & Somerville, Trustees Parizeau Wellesley Realty Trust	15 Walnut St, Suite #150 c/o Danielle Prague Wellesley, MA 02481
65 Lincoln Rd 39-5	LaPlaca, Eric W & Joanna C	65 Lincoln Road Wellesley, MA 02481
61 Lincoln Rd 39-6	Boyd, Kimberly M & Steven K	61 Lincoln Road Wellesley, MA 02481
57 Lincoln Rd 39-7	Kahn, Richard D, Trustee L57 Realty Trust	57 Lincoln Road Wellesley, MA 02481
8 Lincoln Circle 39-8	Rahaman, Soroya M	8 Lincoln Circle Wellesley, MA 02481
10 Lincoln Circle 39-9	Gates, Matthijs A & Anne-Marie	10 Lincoln Circle Wellesley, MA 02481
228 Forest St. 40-1	Wellesley Country Club	300 Wellesley Avenue Wellesley, MA 02481
Wellesley Ave. 40-2	Commonwealth of Massachusetts DCR/MWRA	251 Causeway St. Suite 600 Boston, MA 02114
135 Oakland St. 46-2	Town of Wellesley Natural Resources Commission	525 Washington St. Centennial Park Wellesley, MA 02482

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
7 Lincoln Circle 47-1	Ward, James J & Elizabeth A	7 Lincoln Circle Wellesley, MA 02481
39 Inverness Rd 47-10	Gold, Joshua P & Rebecca P	39 Inverness Road Wellesley, MA 02481
3 Lincoln Circle 47-2	Adams, John F, Jr & Stimmermacher, Jane	3 Lincoln Circle Wellesley, MA 02481
65 Windsor Rd 47-21	Richardson, Lynford M & Richardson, Rosemarie B	65 Windsor Road Wellesley, MA 02481
66 Windsor Rd 47-22	McDivitt, Mark W & Mary Ellen	66 Windsor Road Wellesley, MA 02481
29 Lincoln Rd 47-3	Ryan, Susan E	29 Lincoln Road Wellesley, MA 02481
20 Inverness Rd 47-31	Walker, John R & Wood, Emily	20 Inverness Road Wellesley, MA 02481
6 Lincoln Rd 47-32	Smith, Timothy William & Smith, Mary Kathryn	6 Lincoln Road Wellesley, MA 02481
12 Lincoln Rd 47-32-A	Houston, Bruce J & Molloy, Amy L	12 Lincoln Road Wellesley, MA 02481
24 Lincoln Rd 47-33	Holding, William B, Jr & Pamela R	24 Lincoln Road Wellesley, MA 02481
30 Lincoln Rd 47-34	Asnis, Peter & Brooke	30 Lincoln Road Wellesley, MA 02481
38 Lincoln Rd 47-35	Der, Kenneth & Pearl	38 Lincoln Road Wellesley, MA 02481
42 Lincoln Rd 47-36	Starr, Ian M & Natalie	42 Lincoln Road Wellesley, MA 02481

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
46 Lincoln Rd 47-37	Boyle, Jeffrey H & Regina M	46 Lincoln Road Wellesley, MA 02481
50 Lincoln Rd 47-38	O'Hearn, Ann E, Trustee 50 Lincoln Road Real Estate Trust	50 Lincoln Road Wellesley, MA 02481
25 Lincoln Rd 47-4	Costello, John	25 Lincoln Road Wellesley, MA 02481
2 Lincoln Rd 47-40	Town of Wellesley	525 Washington St. Wellesley, MA 02482
19 Lincoln Rd 47-5	Corsini, Russell & Althea, Trstes Russell V Corsini, Jr 2002 Trust	19 Lincoln Road Althea H Corsini 2002 Trust Wellesley, MA 02481
15 Lincoln Rd 47-6	Flynn, Keenan S	15 Lincoln Road Wellesley, MA 02481
11 Lincoln Rd 47-7	Smith, Amie Witten	11 Lincoln Road Wellesley, MA 02481
7 Lincoln Rd 47-7-B	Sabbey, Christopher N & Alia	7 Lincoln Road Wellesley, MA 02481
38 Inverness Rd 47-8	Keiser, Thomas C & Victoria Rigsby	38 Inverness Road Wellesley, MA 02481
44 Inverness Rd 47-9	Teschke, Jeffrey J & Christina A	44 Inverness Road Wellesley, MA 02481
185 Forest St. 48-5	Town of Wellesley Natural Resources Department	525 Washington St. Parkland Wellesley, MA 02482
231 T Forest St. 48-7-T	Babson College Janet Fishstein	231 Forest Street Facilities Mgement & Planning Babson Park, MA 02457

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

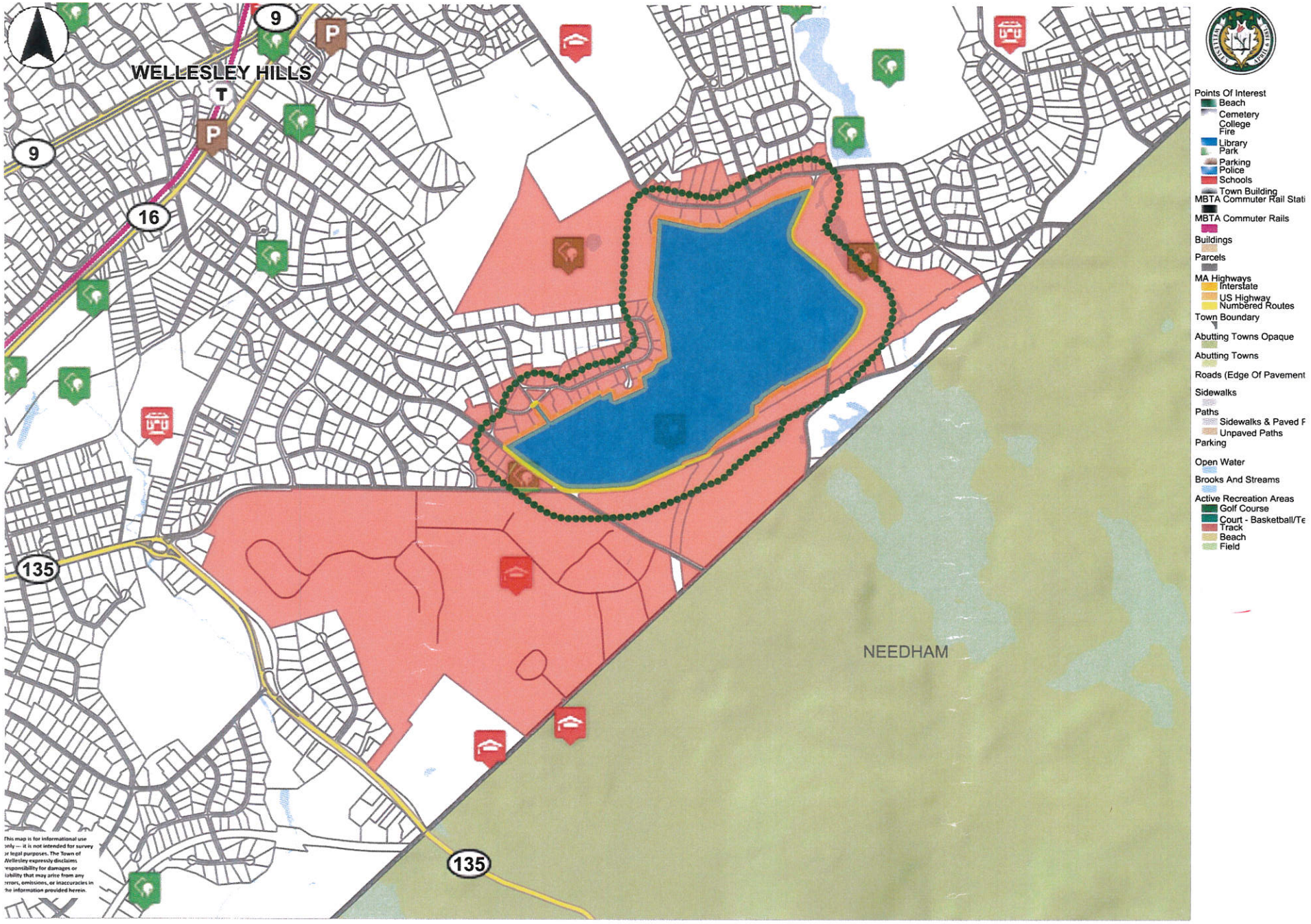
Property Location	Owner of Record	Mailing Address
165 Forest St. 56-1-M	Francis, Roberta Wohl, Trustee Roberta Wohl Francis 2013 Rev Trs	165 Forest Street Wellesley, MA 02481
161 Forest St. 56-1-N	Woodward, Craig M & Julia	161 Forest Street Wellesley, MA 02481
134 Abbott Rd 56-47	Parker, Randy J & Caren B, Trstes Randy J Parker 1994 Trust	134 Abbott Road Caren Brenman Parker 1994 Trust Wellesley, MA 02481
23 Inverness Rd 56-48	Kaiser, William S, Trustee William S Kaiser Revocable Trust	23 Inverness Road Wellesley, MA 02481
140 Abbott Rd 56-49	Davitt, George & Ceremsak, Linda A	140 Abbott Road Wellesley, MA 02481
139 Abbott Rd 56-63	Gilbert-Bono, Elizabeth A, Trstee 139 Abbott Road Realty Trust	139 Abbott Road Wellesley, MA 02481
164 Forest St. 56-64	Clausen, Erinne Jameson & Clausen, Kim Brunn	164 Forest Street Wellesley, MA 02481
155 Forest St. 56-65	LaPoint, Kathleen M	155 Forest Street Wellesley, MA 02481
5 Hewins Farm Rd 57-11	Barnes, Aaron & Lauren	5 Hewins Farm Road Wellesley, MA 02481
3 Hewins Farm Rd 57-12	Smith, Adam Douglas & Oberoi-Smith, Maeghan Luthra	3 Hewins Farm Road Wellesley, MA 02481
1 Hewins Farm Rd 57-13	Frechette, Eleanor F, Trustee Eleanor F Frechette Trust	1 Hewins Farm Road Wellesley, MA 02481
280 Wellesley Ave. 57-14	Collomb, James E & Petra Z	280 Wellesley Avenue Wellesley, MA 02481

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **300 Wellesley Ave.**
Parcel ID: **32-2-A**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
173 Forest St. 57-15	Swayze, Lisa Niemi, Trustee Aqua Living Trust	700 South Ocean Blvd Unit 503 Boca Raton, FL 33432
169 Forest St. 57-16	Aldrich, Hope	169 Forest Street Wellesley, MA 02481
231 Forest St. 67-22	Babson College Janet Fishstein	231 Forest Street Facilities Mgement & Planning Babson Park, MA 02457



1700 3400 ft

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Notified Abutters

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **228 Forest St.**
Parcel ID: **40-1**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
Comeau St. 24-70	Commonwealth of Massachusetts DCR/MWRA	251 Causeway St. Suite 600 Boston, MA 02114
419 Wellesley Ave. 25-4	Town of Wellesley Natural Resources Department	525 Washington St. Water Department Wellesley, MA 02482
101 Brookside Rd 32-2	Wellesley Country Club	300 Wellesley Avenue Wellesley, MA 02481
300 Wellesley Ave. 32-2-A	Wellesley Country Club	300 Wellesley Avenue Wellesley, MA 02481
392 Wellesley Ave. 32-3	Sagan, Robert M & Helen B	392 Wellesley Avenue Wellesley, MA 02481
396 Wellesley Ave. 32-4	Doyle, Vida A & Doyle, John M	396 Wellesley Avenue Wellesley, MA 02481
Wellesley Ave. 32-6	Commonwealth of Massachusetts DCR/MWRA	251 Causeway St. Suite 600 Boston, MA 02114
62 Brookside Rd 33-1	Russell, Gordon C	62 Brookside Road Wellesley, MA 02481
Wellesley Ave. 40-2	Commonwealth of Massachusetts DCR/MWRA	251 Causeway St. Suite 600 Boston, MA 02114
Forest St. 40-3	Commonwealth of Massachusetts DCR/MWRA	251 Causeway St. Suite 600 Boston, MA 02114
185 Forest St. 48-5	Town of Wellesley Natural Resources Department	525 Washington St. Parkland Wellesley, MA 02482

Lorna Lee McCarter
Chief Assessor
11-12-2019

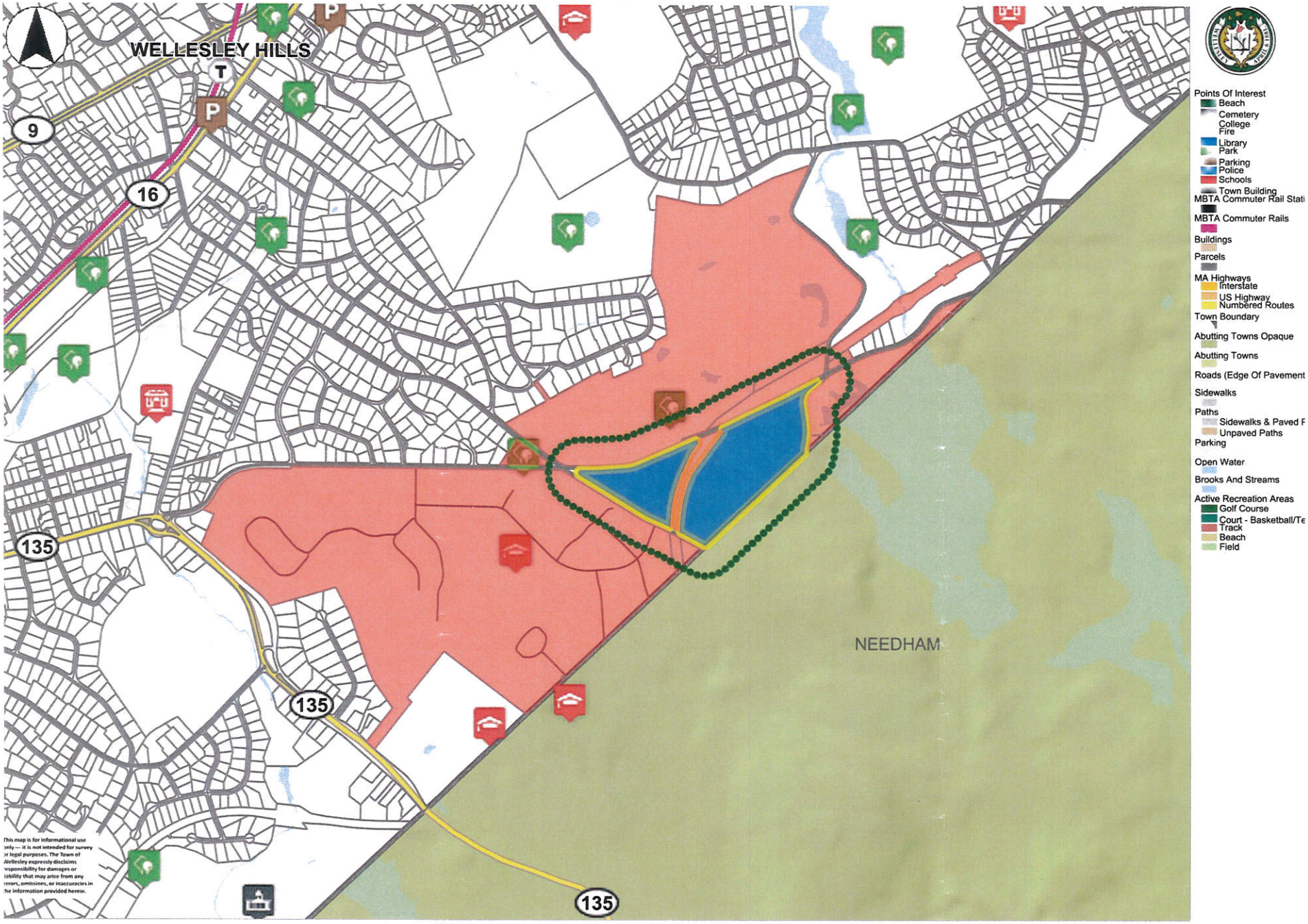
ownership
thru Sept 30, 2019

Town of Wellesley
Abutters List

Conserv. Commission (300 ft)

Date: **11/12/2019**
Address: **228 Forest St.**
Parcel ID: **40-1**
Distance: **300 feet**

Property Location	Owner of Record	Mailing Address
231 T Forest St. 48-7-T	Babson College Janet Fishstein	231 Forest Street Facilities Mgement & Planning Babson Park, MA 02457
231 Forest St. 67-22	Babson College Janet Fishstein	231 Forest Street Facilities Mgement & Planning Babson Park, MA 02457



1700 3400 ft

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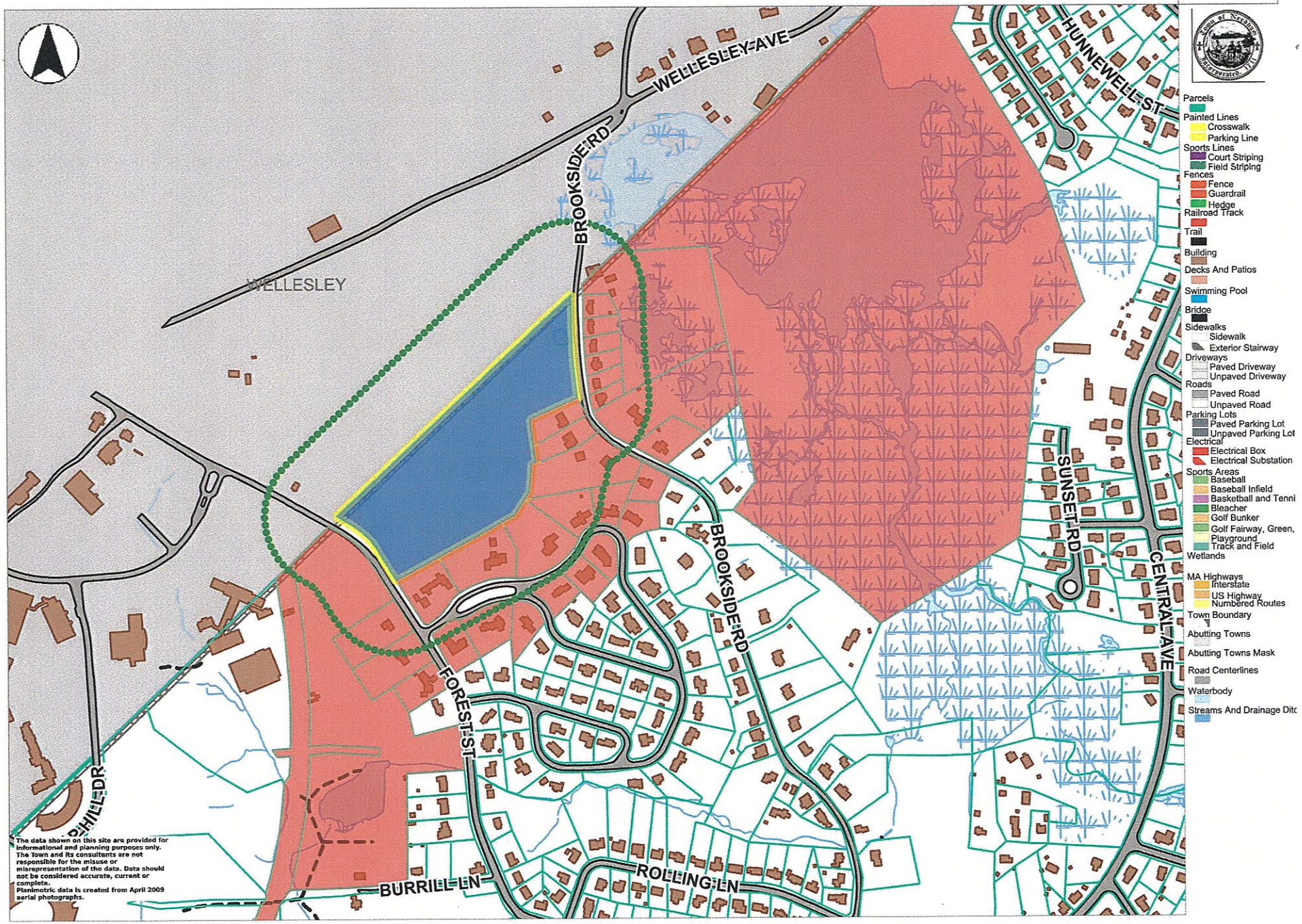
Notified Abutters

NEEDHAM ABUTTERS LIST

0 FOREST STREET
300 FEET

OWNER NAME 1	OWNER NAME 2	MAILING ADDRESS	CITY	ST	ZIP	PARCEL ID	PROPERTY ADDRESS
MDC/WATER DIVISION	C/O MA DEPT. OF CONSERVATION	251 CAUSEWAY ST STE 600	BOSTON	MA	02114	1990810003300000	0 RESERVOIR ST
MAHONEY, EDMUND J. JR. &	MAHONEY, VIVIAN LEE	72 CLARKE CIR	NEEDHAM	MA	02492	1991130000200000	72 CLARKE CIR
RABINOVITZ, JENNIFER		71 BROOKSIDE RD	NEEDHAM	MA	02492	1991130000300000	71 BROOKSIDE RD
DONAHUE, LAWRENCE &	DONAHUE, PAMELA A.	68 CLARKE CIR	NEEDHAM	MA	02492	1991130000400000	68 CLARKE CIR
JOYCE, KATHLEEN M. &	JOYCE, JAMES R.	69 CLARKE CIR	NEEDHAM	MA	02492	1991130000500000	69 CLARKE CIR
RESNIC, FREDERIC S. & KAREN M.	C/O RESNIC, KAREN M. TR.	51 CLARKE CIR	NEEDHAM	MA	02492	1991130000600000	51 CLARKE CIR
TOBIN, JAMES G.		41 CLARKE CIR	NEEDHAM	MA	02492	1991130000700000	41 CLARKE CIR
MOSHER, CLIFFORD R		35 CLARKE RD	NEEDHAM	MA	02492	1991130000800000	35 CLARKE RD
BARRETT, GORDON C. &	BARRETT, PATRICIA D.	21 CLARKE RD	NEEDHAM	MA	02492	1991130000900000	21 CLARKE RD
FISCHER, HEIDI		5 CLARKE RD	NEEDHAM	MA	02492	1991130001200000	5 CLARKE RD
GRIMES, KEVIN T. &	GRIMES, ELIZABETH J	12 CLARKE RD	NEEDHAM	MA	02492	1991130001300000	12 CLARKE RD
BURNS, MARK F. & CHRISTINE M. TRS.	C/O KEATOR, MATTHEW & VIRGINIA	28 CLARKE RD	NEEDHAM	MA	02492	1991130001500000	28 CLARKE RD
VAN PUTTEN, STEVEN M &	VAN PUTTEN, CAROLYN M.	52 CLARKE CIR	NEEDHAM	MA	02492	1991130001600000	52 CLARKE CIR
DALY, JOHN &	DALY, EILEEN	75 CLARKE CIR	NEEDHAM	MA	02492	1991130001700000	64 CLARKE CIR
MURPHY, MICHAEL F. &	MURPHY, MARGARET G.	57 BROOKSIDE RD	NEEDHAM	MA	02492	1991130001900000	57 BROOKSIDE RD
BORRELLI, CHERYL R.		39 BROOKSIDE RD	NEEDHAM	MA	02492	1991130002000000	39 BROOKSIDE RD
FRANKENTHALER, JOHN	FRANKENTHALER, LAURA	33 BROOKSIDE RD	NEEDHAM	MA	02492	1991130002100000	33 BROOKSIDE RD
DASEY, KAREN D.		44 BROOKSIDE RD	NEEDHAM	MA	02492	1991130002200000	44 BROOKSIDE RD
MERCURI, ALBERT J. JR.		38 BROOKSIDE RD	NEEDHAM	MA	02492	1991130002300000	38 BROOKSIDE RD
FINK, ANDREW C. &	DIAMANTIS, ALLESSANDRA	30 BROOKSIDE RD	NEEDHAM	MA	02492	1991130002400000	30 BROOKSIDE RD
COLLINS, MICHAEL T &	COLLINS, MEGHAN C	24 BROOKSIDE RD	NEEDHAM	MA	02492	1991130002500000	24 BROOKSIDE RD
BURKE, JORDAN E. &	BURKE, AMELIA S	18 BROOKSIDE RD	NEEDHAM	MA	02492	1991130002600000	18 BROOKSIDE RD
193 WORCESTER RD ASSOCIATES LLC		62 BROOKSIDE RD	WELLESLEY	MA	02482	1991130002700000	12 BROOKSIDE RD
WELLESLEY COUNTRY CLUB		WELLESLEY AVE	WELLESLEY HLS	MA	02481	1991130002900000	0 FOREST ST
BABSON INSTITUITE		BABSON PK	BABSON PARK	MA	02457	1991140000100000	0 FOREST ST
BABSON COLLEGE	FACILITIES MANAGEMENT & PLANNING	COLLEGE DR	BABSON PARK	MA	02457	1991140000200000	37 FOREST ST
MULROY, JAMES T. &	MULROY, ALICE E.	51 FOREST ST	NEEDHAM	MA	02492	1991140000300000	51 FOREST ST
CIRINO, MARIA A. & BARBEAU, ELIZABETI	C/O CARON, GERARD & CUSACK, SHEILA	61 FOREST ST	NEEDHAM	MA	02492	1991140000400000	61 FOREST ST
TOWN OF WELLESLEY	PUBLIC WORKS DEPT	P. O. BOX 217	WELLESLEY	MA	02482	1993100000100000	0 ROSEMARY MEADOW
RUSSELL, GORDON C., TR		62 BROOKSIDE RD	WELLESLEY	MA	02481	1993100000600000	62 BROOKSIDE RD
PONGOR, PAUL J. &	PONGOR, FAITH A.	60 BROOKSIDE RD	NEEDHAM	MA	02492	1993100000700000	60 BROOKSIDE RD
KWONG, TONY	KWONG, PRISCILLA	74 BROOKSIDE RD	NEEDHAM	MA	02492	1993100000800000	74 BROOKSIDE RD

Certified as list of parties in interest under Mass. General Laws and Needham Zoning By-Law, to the Best of our knowledge
for the Needham Board of Assessors.....



0 700 1400 ft

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Appendix C

SUPPORTING DOCUMENTATION

ALLEN & MAJOR ASSOCIATES, INC.

APPENDIX C

EXHIBIT A

I PROJECT INFORMATION

Summary

Remove and replace existing golf course irrigation system at Wellesley Country Club. Eight (8) directionally drilled holes will be utilized to replace piping beneath streambanks and under the streams.

Regulated Wetland Resource Areas Associated with the Site

- Buffer Zones (Bylaw Section 2.5)
- 25-foot No-Disturbance Zones (Bylaw Section 2.5)
- (Land Under) Waterbodies and Waterways (Act 310 CMR10.57, Bylaw Section 2.2)
- Bank (Act – 310 CMR10.54 and Bylaw Section 2.3)
- Bordering and Isolated Vegetated Wetlands (Act 310 CMR10.55, Bylaw Section 2.4)
- Riverfront Area (Act 310 CMR10.58, Bylaw Section 2.6)

Applicant and Property Owner

Martin Ryan, General Manager
Wellesley Country Club
300 Wellesley Avenue
Wellesley, MA 02481
marty@wellesleycc.com
(781) 235-7333 x 202

Representative

Mike Toohill
Coneco Engineers & Scientists
238 Littleton Rd, Suite 105
Westford, MA 01886
mtoohill@coneco.com
(978) 656-8684

Date of Issuance: November 28, 2019 (placeholder)

Documents of Record

- **Notice of Intent** and supporting documents including a Request for Wetlands Bylaw Waiver for work in the 25-foot No-Disturbance Zone; received by the Natural Resources Office on August 29, 2019.
- **Existing Conditions Plan of Irrigation System**, undated. Received by the Natural Resources Office on August 29, 2019.
- **Hydraulic Layout Plan, Entire Property**; 1" = 100'; prepared by Paul F. Granger, certified irrigation designer #000595 of Aqua Agronomic Solutions, Inc.; dated May 17, 2019 and revised August 22, 2019; received by the Natural Resources Office on August 29, 2019.

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EXHIBIT A

- **Hydraulic Layout Plans, Resource Areas and Buffer Zones**; 1″ = 40′, 6 sheets, prepared by Paul F. Granger, certified irrigation designer #000595 of Aqua Agronomic Solutions, Inc., dated May 17, 2019 and revised August 22, 2019; received by the Natural Resources Office on August 29, 2019.

II. FINDINGS

A. Definitions

Buffer Zone: A regulated wetland area under the Massachusetts Wetlands Protection Act and is located within 100-feet of an area specified in 310 CMR 10.02(1)(a). The area is a resource area under the Wellesley Wetlands Protection Bylaws.

Critical Root Zone (CRZ): The minimum area beneath the canopy of a tree which must be left undisturbed in order to preserve a sufficient root mass to give a tree a reasonable chance of survival. The CRZ is represented by a concentric circle centering on the tree's trunk and extending outward towards the tree's drip-line. The minimum area of the CRZ shall be dependent on the required minimum radius of the CRZ; the required minimum radius of the CRZ shall be determined by multiplying a tree's DBH (in inches) by eighteen (18) inches, with the resulting product constituting the minimum radius of the CRZ. A tree with a DBH of twenty (20) inches shall have a CRZ with a minimum radius of 360 inches or 30 feet (20″ x 18″ = 360″ or 30′).

Diameter at Breast Height (DBH): The diameter at a height of four and one-half (4.5) feet above the existing grade at the base of the tree.

Growing Season: One growing season is defined as the portion of the year when soil temperature (measured at 20 inches below the surface) is above biological zero (5°C or 41°F). The approximate dates for one growing season in Wellesley are April 30 through October 7.

Mean Annual High Water Line: The line that is apparent from visible markings or changes in the character of soils or vegetation due to the prolonged presence of water and that distinguishes between predominantly aquatic and predominantly terrestrial land. Field indicators of bankfull conditions shall be used to determine the mean annual high water line. Bankfull field indicators include, but are not limited to: changes in slope, changes in vegetation, stain lines, top of pointbars, changes in bank materials, or bank undercuts. In most rivers, the first observable break in slope is coincident with bankfull conditions and the mean annual high water line. In some river reaches, the mean annual high water line is represented by bankfull field indicators that occur above the first observable break in slope, or if no observable break in slope exists, by other bankfull field indicators. These river reaches are characterized by at least two of the following features: low gradient, meanders, oxbows, histosols, a low-flow channel, or poorly-defined or nonexistent banks.

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EXHIBIT A

Resource Area: Any area designated within the Massachusetts Wetlands Protection Act and/or the Wellesley Wetlands Protection Bylaws.

Degraded areas: impervious surfaces, absence of topsoil, and/or presence of junkyards or abandoned dumping grounds.

B. Existing Conditions

The subject parcel owned by the Wellesley Country Club, is located at 300 Wellesley Avenue and 228 Forest Street in Wellesley, MA and in Needham. Within the property are multiple constructed ponds, including an irrigation pond +/-55,550 sf in area, managed by an on-demand onsite groundwater supply well. The banks of the irrigation pond adjacent to the golf holes consists primarily of rough and fairway (turf grass) and no Bordering Vegetated Wetlands.

C. Proposed Conditions

Replace the existing irrigation system on the 18-hole golf course with a new system containing moisture tensiometer feedback, zone control, and larger distribution pipes from 6 to 14 inches in diameter. No increase in irrigated acreage is expected nor increase in water withdrawals. The system will likely result in decreased water use. The turf will be removed, stockpiled, and immediately replaced within one day. Each trench will be immediately filled after the pipe is installed and turf replaced. Approximately 1,811 sf of the 25-foot No-Disturbance Zone of Banks of an Intermittent Stream will be temporarily disturbed. +/- 12,438 sf will be temporarily disturbed in the Riverfront Area of Academy Brook, with +/- 5,883 sf within the Inner Riparian Zone. No areas of existing jurisdictional Banks and Land Under Waterbodies and Waterways are proposed to be altered as a result of directional drilling under the elevations of these Resource Areas.

D. Wetland Delineation

The Wellesley Wetlands Protection Committee (WPC) reviewed the delineation of wetland resource areas as shown on the NOI plans. The WPC makes no determination as to the completeness or accuracy of the delineation as presented as the past delineation has expired. The Committee determined to accept a reflagging performed on (date?) October 23, 2019 by Mike Toohill of Coneco, Inc. Flags were hung within 25-feet adjacent to work areas. A site walk was performed by the Wetland Administrator (WA) on (date) and confirmed the accuracy of the delineation. The WA utilized vegetation, hydrology, soils, and /or topography. The site walk took place before frost and snow cover and prior to construction. More detail here:

Banks (around ponds), Riverfront Area (Academy Brook, a perennial stream), and the 25-foot No-Disturbance Zone lines were identified in the field by (color) flags (blue for __ pink for __). No Bordering Vegetated Wetlands were identified by the wetland scientist nor the Wetlands Administrator.

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EXHIBIT A

The WA did nor did not confirm the top of bank is a suitable field indicator to define the inner edge (boundary) of Riverfront Area. *Other indicators utilized included other bankfull field indicators such as; …*) Under the Massachusetts Wetlands Protection Act, Buffer Zone is not a resource area but is a regulated wetland area and is located within 100-feet of an area specified in 310 CMR 10.02(1)(a).

E. FINDINGS UNDER THE WETLANDS PROTECTION ACT & MADEP'S WETLAND PROTECTION REGULATIONS

1. Stormwater Management Standards (310 CMR10.05(6)(k-q)

The WPC finds the work is a Redevelopment project pursuant to Standard 7 of the Stormwater Management Standards and thus subject to Standards 2 through 6 only to the maximum extent practicable. The WPC or its Administrator reviewed the stormwater impacts under 310 CMR 10.05(6)(k). No Riverfront Area nor Buffer Zone is being altered or filled for the impoundment, detention, or retention of stormwater. The WPC finds that the project meets the ten stormwater management standards at 310 CMR 10.05(6)(k) to the extent required by Standard 7. No changes to the existing storm water system are required as there is no impervious surface increase.

2. Buffer Zone Alterations under the Wetlands Protection Act (310 CMR 0.53(1)

The WPC has determined that work in the 100-foot Buffer Zone of Bank (and _____) is found to comply with applicable standards contained under the WPA regulations as stated in 310 CMR 10.53(1). Factors considered were the extent of the work, the proximity to the resource areas, the need for erosion controls, and the measures employed to prevent adverse impacts to resource areas during and following the work. Special conditions are required to maintain erosion and sedimentation controls before, during, and after construction.

3. Bank (310 CMR10.54)

No areas of existing jurisdictional Banks are proposed to be either temporarily or permanently altered as a result of directional drilling under the elevations of these Resource Areas. Thus the project complies with the applicable performance standards for Bank under the Act.

4. Land Under Waterbodies and Waterways (310 CMR10.56)

No areas of existing jurisdictional Land Under Waterbodies and Waterways are proposed to be either temporarily or permanently altered as a result of directional drilling under the elevations of these Resource Areas. The water carrying capacity within the defined channel shall not be impaired, and ground and surface water quality will be maintained. Thus the project complies with the applicable performance standards for Land Under Waterbodies and Waterways under the Act.

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EXHIBIT A

5. Riverfront Area (310 CMR10.58(5)

The work will temporarily disturb approximately 12,438 sf of Riverfront Area, with approximately 5,883 sf of this within the Inner Riparian Zone to Academy Brook and the remaining 6,555 sf in the Outer Riparian. The Committee is satisfied by the project's compliance with performance standards under the Redevelopment provision, as follows:

(a) At a minimum, proposed work shall result in an improvement over existing conditions of the capacity of the riverfront area to protect the interests identified in M.G.L. c. 131 § 40. No additional impervious surfaces are proposed.

(b) Stormwater management is provided according to standards established by the Department. No changes to drainage patterns is proposed.

(c) Proposed work shall not be located closer to the river than existing conditions or 100 feet, whichever is less, or not closer than existing conditions within 25 foot riverfront areas, except in accordance with 310 CMR 10.58(5)(f) or (g). No new work will occur closer than existing conditions.

(d) Proposed work, including expansion of existing structures, shall be located outside the riverfront area or toward the riverfront area boundary and away from the river, except in accordance with 310 CMR 10.58(5)(f) or (g). No new existing structures are proposed.

(e) The area of proposed work shall not exceed the amount of degraded area, provided that the proposed work may alter up to 10% if the degraded area is less than 10% of the riverfront area, except in accordance with 310 CMR 10.58(5)(f) or (g). No new impervious surfaces or degraded materials are proposed.

(f) When an applicant proposes restoration on-site of degraded riverfront area, alteration may be allowed notwithstanding the criteria of 310 CMR 10.58(5)(c), (d), and (e) at a ratio in square feet of at least 1:1 of restored area to area of alteration not conforming to the criteria. No restoration is proposed nor required.

(g) When an applicant proposes mitigation either on-site or in the riverfront area within the same general area of the river basin, alteration may be allowed notwithstanding the criteria. No mitigation is proposed or required.

(h) The issuing authority shall include a continuing condition in the Certificate of Compliance for projects under 310 CMR 10.58(5)(f) or (g) prohibiting further alteration within the restoration or mitigation area. No new alteration was proposed.

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EXHIBIT A

Thus the project complies with the applicable performance standards for Redevelopment of the Riverfront Area under the Act.

6. Estimated Habitats of Rare Wildlife (310 CMR 10.59)

If the project is within estimated habitat which is indicated on the most recent Estimated Habitat Map of State-listed Rare Wetlands Wildlife, a full NOI must be submitted to the Natural Heritage and Endangered Species Program. Within 30 days of the filing of such a Notice of Intent with the issuing authority the Program shall determine whether any state-listed species identified on the aforementioned map are likely to continue to be located on or near the site of the original occurrence and, if so, whether the area to be altered by the proposed project is in fact part of such species' habitat. Such determination shall be presumed by the issuing authority to be correct. Any proposed project which would alter a resource area that is not located on the most recent Estimated Habitat Map (if any) provided to the conservation commission, shall be presumed not to be within a rare species' habitat. The WPC did not make a determination as to whether there will be no adverse effects on rare species habitat. No Northern-long-eared bat habitat is expected to be altered.

7. Conclusion

The WPC finds that the overall project, including proposed mitigation measures and as conditioned herein, will maintain the ability of the buffer zone and wetland resource areas to serve and protect the interests of the Massachusetts Wetlands Protection Act, MGL Chapter 131, Section 40 and may be permitted under the Limited Project provision at 310 CMR 10.53(3)(f). Therefore, the Committee issues an Order of Conditions under the Wetlands Protection Act.

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F. FINDINGS UNDER THE WELLESLEY WETLANDS PROTECTION BYLAW & REGULATIONS

1. 25-foot No-Disturbance Zone - Bylaw Section 2.5(4)(a)1.)

As the project is limited to temporary disturbance and no tree removal is expected, and erosion and sediment controls are to be maintained throughout construction of the active portion of the site, with the conditions set forth within this Order of Conditions, the project will not yield any short or long term negative impact to the Buffer Zone and its ability to serve the interests of the Act and Bylaw.

2. 25-75-foot Limited Disturbance Zone - Bylaw Section 2.5(4)(a)2.

Work associated with the trenching and pipe replacement will take place within the 100-foot Buffer Zone to Bank. No work is proposed within the resource areas; work is limited to the existing lawfully maintained turfgrass footprint and will not create a new disturbance. Best Management Practices include erosion and sedimentation controls: i.e. staked compost socks and the reuse and replacement of existing sod. The Committee finds that work within the 25-75-foot Limited Disturbance Zone as described in the project narrative will have no impact on the adjacent resource areas.

EXHIBIT A

3. Waiver of Performance Standards for Work in the 25-foot No-Disturbance Zone

The applicant requested a waiver from the performance standards set forth in the Wellesley Wetlands Protection Regulations for work in the 25-foot No-Disturbance Zone. The WPC, under Section 1.6(9) of the Regulations, recognizes the applicant has met its burden of proof with regard to the proposed request for a Waiver of Regulation for meeting performance standard 2.5(4)(a)1.

The Committee determined that the Bylaw Interests and Values; the work and its natural, consequential, and cumulative effects on the Bylaw Interests and Values have been minimized; and mitigation measures designed to functionally improve or enhance the natural capacity of the affected Bylaw Resource Area and/or other Bylaw Resource Areas to preserve or protect the Bylaw Interests and Values are provided as part of the submittal.

The Committee determined that it meets the standards for stormwater management under the Bylaw as the applicant has considered erosion and sediment controls during site preparation, construction, and redevelopment.

4. Waterbodies and Waterways Bylaw Section 2.2(4)(a)1.-5.

No areas of existing jurisdictional Waterbodies and Waterways are proposed to be either temporarily or permanently altered as a result of directional drilling under the elevations of this Resource Area in eight (8) sites across the property. With the utilization of staked compost socks and limits of work clearly identified on the plan (has this been done?), the WPC determined that the activities shall not impair any of the following: the water carrying capacity within the defined channels and basins; the surface water and groundwater quality; the capacity of the water and land thereunder to provide breeding habitat, escape cover, and food for fisheries; the capacity to provide important wildlife habitat function; and the capacity to provide for recreation. Thus the project complies with the applicable performance standards for Waterbodies and Waterways under the Bylaw.

5. Bank (Bylaw Section 2.3(4))

No areas of existing jurisdictional Banks are proposed to be either temporarily or permanently altered as a result of directional drilling under the elevations of these Resource Areas. With the utilization of staked compost socks and limits of work clearly identified on the plan (has this been done?) the WPC determined that the activities shall not impair any of the following: the physical stability of the Banks; the water carrying capacity of the defined channel or basin within the Banks; the surface water and groundwater quality; the capacity to provide breeding habitat, escape cover, and food for fisheries; the capacity to provide important wildlife habitat function; and the capacity to provide for recreation. Thus the project complies with the applicable performance standards for Bank under the Act and Bylaw.

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EXHIBIT A

6. Conclusion

The WPC finds that the overall project, including proposed mitigation measures and as conditioned herein, will not have an unacceptable significant or cumulative effect upon the ability of any Resource Areas to protect the Interests and Values set forth in the Wellesley Wetlands Protection Bylaw. Therefore, the Committee issues an Order of Conditions under the Wellesley Wetlands Protection Bylaw and Regulations.

The Wellesley Wetlands Protection Committee finds that the proposed project can be conditioned to protect the Interests of the Wetlands Protection Act and Wellesley Wetlands Bylaw. As such, in addition to the General Conditions of the Order, the project must comply with the following Special Conditions:

III. SPECIAL CONDITIONS

GENERAL

1. Except where modified by the following conditions, all work shall be performed in accordance with the plans and the Notice of Intent referenced above. Where a conflict exists between the referenced plans and these Conditions, the Conditions will govern.

2. The Wellesley Wetlands Protection Committee (WPC or Committee) reserves the right to enter upon the premises to inspect the work for compliance with the Order of Conditions.

3. If the Applicant intends to make any change in the work permitted hereunder, the Applicant must submit a written request to the Committee with plans or description that reflects the proposed changes. Upon review of said request, the Committee may require the Applicant to submit a request for amendment to the Order of Conditions. No changes may be made before said written request is given to the Committee and approval thereof in writing is given by the Committee. Changes needing approval include (but are not limited to) landscaped areas, alteration of vegetation, alteration of approved construction sequence, regrading, and all other alterations within resource areas and buffer zones.

4. If any change is made, or plans altered or revised, without prior approval of the Committee, additional conditions and/or enforcement actions may be imposed to protect the interests of the Wetlands Protection Act and the Wellesley Wetlands Protection Bylaw.

5. The Committee reserves the right to amend this Order of Conditions after a legally advertised public hearing if plans or circumstances are changed or if new conditions or information so warrant.

6. The term "applicant" as used in this Order of Conditions shall refer to the owner, any successor in interest or successor in control of the property referenced in the Notice of

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EXHIBIT A

Intent, supporting documentation and this Order. The Committee shall be notified in writing within 30 days of all transfers of title of any portion of the property that take place prior to the issuance of the Certificate of Compliance.

7. The applicant shall obtain all permits, variances and approvals required by local bylaw in accordance with 310 CMR 10.05(4)(e).

8. It is the responsibility of the applicant to complete any review required by all agencies with jurisdiction over the activity that is the subject of this Order of Conditions, and to procure all required permits or approvals before any work commences. These reviews, permits and approvals may include but are not limited to the following:

    i. Review by the U.S. Army Corps of Engineers for any Category 2 or Individual Permit activity, and procurement of any permits or approvals identified by the Corps;
    ii. Review by the Department of Environmental Protection (DEP) and procurement of any permits or approvals identified by DEP;
    iii. Review by the Massachusetts NHESP for any projects within estimated and/or priority habitat and any permits of approvals identified by the program;
    iv. Review by the local planning boards, boards of health, zoning boards and building inspectors, and procurement of any permits or approvals required by these boards or agencies;

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PRECONSTRUCTION

9. Submit a tree protection plan for any area where work is proposed within the Critical Root Zone of any existing tree; to be reviewed and approved by the Administrator in writing before work may begin.

10. Erosion controls shall be installed at the site in accordance with the plans (to be) approved by this Order and/or per the direction of the Committee or Wetlands Administrator. Controls shall be entrenched 4-inches in the ground and double staked. Silt fencing shall be entrenched a minimum of 4-inches in the ground. Silt sacks (not filter fabric) shall be installed in all catch basins located adjacent to the site that may receive stormwater runoff from the site.

11. After erosion controls, tree protection, and the MA-DEP sign have been installed and prior to the start of construction, the applicant shall request the Committee and/or Wetlands Administrator to conduct a pre-construction site inspection to ensure all preconstruction conditions have been fulfilled. No work on the project may begin until the Committee or Assistant NRC Director so authorizes.

EXHIBIT A

12. All "Preconstruction" conditions of the Order shall be satisfied prior to the start of construction.

13. The applicant shall submit, in writing, the names and contact information of the person(s) responsible at all times for compliance with this Order and for maintenance of erosion and sedimentation controls. Such parties shall consist of the contractor, project engineer, wetlands specialist, etc.

CONSTRUCTION

14. A copy of the above-referenced plans and this Order of Conditions must be provided to the Contractor **prior to the commencement of work** and must be available **at all times** at the construction site for reference.

15. Except where modified by these Conditions, all work must be performed in accordance with the Notice of Intent and plans referenced above. Where a conflict exists between the referenced plans and these Conditions, the Conditions will govern.

16. No work, disturbance, or alteration may occur on the Resource Area side of the erosion control barrier, which will also serve as a limit of work unless permitted under this Order. No heavy equipment may operate beyond the limit of work at any time. No construction materials, stockpiled soil or fill, debris, brush, leaves, or other materials may be placed beyond the limit of work.

17. No plants listed on the latest Massachusetts Department of Agricultural Resources Prohibited Plant List may be brought onto or planted anywhere on the property. (Plant List is available at http://www.mass.gov/agr/farmproducts/Prohibited_Plant_Index2.htm.)

18. The applicants must keep at least 25 feet of extra silt fence and 25 feet of straw wattle or compost socks on site in case there is a need for immediate repair of erosion controls or if sediment is found to be leaving the site at any location.

19. The applicants must remove all silt caught by straw bales or wattles and siltation fence at least once every two weeks and whenever the silt collects to a height greater than 1/3 the height of the barrier in any location. The applicant shall immediately report to the Committee any sediment that goes beyond the erosion control line. Applicant shall take whatever steps necessary to prevent further damage to the resource area, and must then submit to the Committee a plan for remediation.

20. If dewatering is necessary for construction, the Applicant must submit a plan to the Wetlands Protection Committee identifying how dewatering will be accomplished, where water will be discharged, and what measures will be used to protect adjacent resource areas. **No**

DRAFT v2

EXHIBIT A

dewatering is allowed until the Committee or Administrator has reviewed and approved of the dewatering plan and inspected and approved the installation of the dewatering controls.

21. There shall be no stockpiling of soil, sand or similar unconsolidated material within 100 feet of the Bordering Vegetated Wetland unless otherwise authorized by these Conditions, by the Wetlands Protection Committee, or by the Wetlands Administrator. Any stockpile of soil, sand, or similar materials that is permitted within a Buffer Zone or Resource Area must be enclosed within a line of entrenched and staked straw bales and silt fence. In the event that earthwork ceases for more than 10 days, all exposed soils must be stabilized with a temporary vegetative cover, straw mulch, or other method of erosion control accepted by the Wetlands Protection Committee.

22. No fueling or maintenance of vehicles shall be allowed within a Buffer Zone or Resource Area. Fuel shall be stockpiled outside of all Resource Areas.

23. No construction materials, debris, brush, leaves or other materials shall be deposited within the Resource Area or down gradient of the limit of work

24. At the end of each workday, the applicant or contractor shall mechanically sweep or manually sweep sediments from the adjacent streets, unless tracking and sediment is not evident on the streets.

25. Following the completion of construction and grading, all exposed soils within 100 feet of the Resource Area must be stabilized with a permanent vegetative cover. Bark mulch or wood mulch will not be considered to provide a permanent stabilization on slopes with a gradient steeper than 3:1.

26. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediment be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediment as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Wetlands Protection Committee, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order. The Committee reserves the right to impose additional conditions on portions of this project to mitigate any impacts which could result from site erosion, or any noticeable degradation of surface water quality discharging from the site.

POST CONSTRUCTION

27. The Applicant must submit a request for a Certificate of Compliance on WPA Form 8A

DRAFT v2

following the completion of construction and stabilization. An As-Built plan showing all structures and grading and plantings, signed and stamped by a Professional Engineer, Registered Land Surveyor or Registered Landscape Architect must be submitted to the Commission at the time a Certificate of Compliance is requested. A certificate signed by a registered professional engineer, surveyor or landscape architect stating that all work has been completed strictly in accordance with the Order of Conditions shall accompany this plan. If such work has not been so completed, said certificate must describe in detail any deviations from the plans as approved by the Committee.

28. Upon completion of the project, excess material including but not limited to soil, cut vegetation or other landscape debris generated from work associated with this project shall be reused or stored on-site in areas outside of the buffer zone or removed from the site and disposed of in a legal fashion.

29. With the approval of the Committee or Administrator, erosion controls may be removed from the site when the surface is permanently stabilized. These must be removed before the issuance of a Certificate of Compliance.

30. There shall be no sedimentation into wetlands or water bodies from discharge pipes or surface runoff leaving the site.

CONDITIONS IN PERPETUITY

31. Wetlands or wetland buffers located on this property are subject to the Massachusetts Wetlands Protection Act (MGL Ch. 131, s. 40) and the Wellesley Wetlands Bylaw. Other than in the course of maintaining landscaping, detention basins and flood compensatory storage area, any work within a wetland resource area or adjacent buffer zones that might fill, excavate, or otherwise alter that area requires approval by the Wellesley Wetlands Protection Committee, in accordance with the Act and Bylaw. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance or a Certificate of Compliance.

32. Fertilizer and Pesticide Use: The project area is maintained under an IPM/TM Plan prepared by the Wellesley Country Club titled "Turfgrass Management Plan for the Wellesley Country Club: Using an Integrated Pest Management Approach." The Applicant will forward any updates to the plan to the Wetlands Protection Committee for informational purposes only.

33. Only calcium-based deicing chemicals may be used on surfaces where runoff or drainage will discharge into wetland resource areas. Note: The entire property drains to wetlands resource areas. This Condition is ongoing and does not expire with the expiration of the Order of Conditions or the issuance or a Certificate of Compliance.

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EXHIBIT A

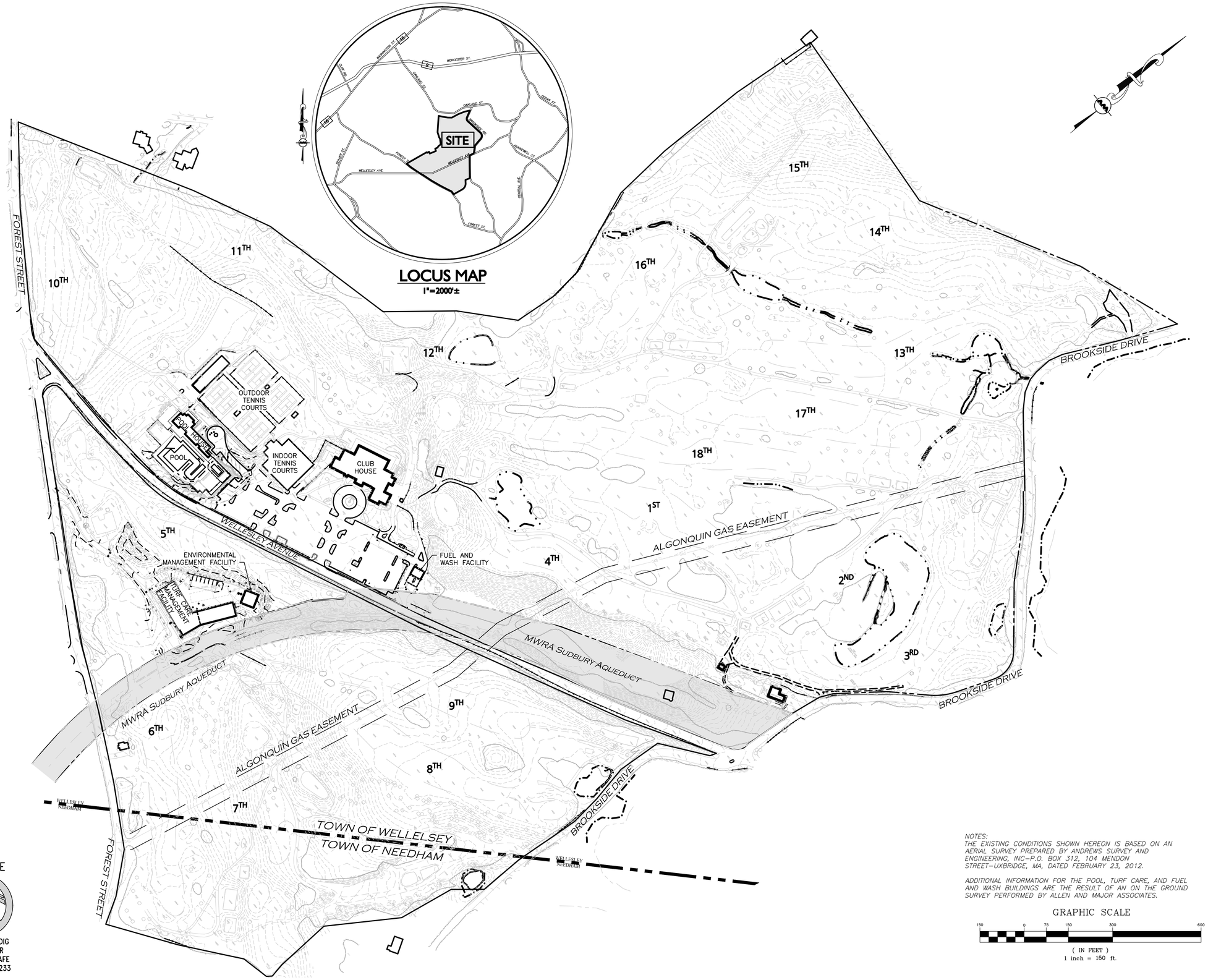
DRAFT v2

Appendix D

PLANS

ALLEN & MAJOR ASSOCIATES, INC.

APPENDIX D



NOTES:
THE EXISTING CONDITIONS SHOWN HEREON IS BASED ON AN AERIAL SURVEY PREPARED BY ANDREWS SURVEY AND ENGINEERING, INC–P.O. BOX 312, 104 MENDON STREET–UXBRIDGE, MA, DATED FEBRUARY 23, 2012.

ADDITIONAL INFORMATION FOR THE POOL, TURF CARE, AND FUEL AND WASH BUILDINGS ARE THE RESULT OF AN ON THE GROUND SURVEY PERFORMED BY ALLEN AND MAJOR ASSOCIATES.

M:\PROJECTS\1828-02H\CIVIL\DRAWINGS\CURRENT\1828-02F - MWRA PLAN.DWG

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

OWNER:
WELLESLEY COUNTRY CLUB
300 WELLESLEY AVE. 1910 WELLESLEY, MA

PROJECT:
IRRIGATION IMPROVEMENTS
300 WELLESLEY AVENUE
WELLESLEY, MA 02481

PROJECT NO.	1828-02H	DATE:	11-15-2019
SCALE:	1" = 150'	DWG. NAME:	C-1828-02H_
DESIGNED BY:	PGM	CHECKED BY:	PLC

PREPARED BY:
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering ◆ land surveying
environmental consulting ◆ landscape architecture
www.allenmajor.com
10 MAIN STREET
LAKEVILLE MA 02347
TEL: (508) 923-1010
FAX: (508) 923-6309
WOBURN, MA ◆ LAKEVILLE, MA ◆ MANCHESTER, NH

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DRAWING TITLE:
EXISTING CONDITIONS PLAN

SHEET No.
V-101

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Legend

- Toro Weather Station with Wireless Communication
- Rain Bird WS-PRO2-WL-S, Weather Station with Wireless Communication
- Toro INF35-336-5, PC Setting VIH Sprinkler with LSM - Producing 24.4 gpm at 65 psi, 60' Spacing
- Rain Bird A-751-E-70-32, PC Setting VIH Sprinkler - Producing 24.5 gpm at 70 psi, 60' Spacing
- Toro INF35-336-5, PC Setting VIH Sprinkler with LSM - Producing 24.4 gpm at 65 psi, 60' Spacing
- Rain Bird A-751-E-70-32, PC Setting VIH Sprinkler - Producing 24.5 gpm at 70 psi, 60' Spacing
- Toro 220G-27-06DL, 1½" Pressure Regulated Electric Valve
- Rain Bird 150-EFB-CP-PRS-D, 1½" Pressure Regulated Electric Valve
- Mainline Valve, Line Size
- 4" Lateral Valve
- 2" Lateral Valve
- DR 13.5 4710 HDPE Pipe, Size as Indicated
  - 14" Pipe
  - 12" Pipe
  - 10" Pipe
  - 8" Pipe
  - 6" Pipe
  - 4" Pipe
  - 3" Pipe
- 2" DR 13.5 4710 HDPE Pipe

Notes:

1. This schematic is intended only as a guide for the installation. It does not depict exact placement of the components. Final locations of irrigation components including but not limited to mainline routing, sprinklers, quick coupling valves & air release valves will be field staked.
2. Irrigation contractor is responsible for their own site visit, measurements and material takeoffs.
3. All green feeds shall be 4" with 3" green loops.
4. Fifteen (15) Valmatic Air Release Valves shall be allocated and shall be staked on site by irrigation consultant.
5. Twenty (20) Quick Coupler Valves shall be allocated per hole and shall be staked on site by irrigation consultant and golf course superintendent. At a minimum there shall be one quick coupler valve installed on the live side of each green feed and two on each green loop.

Scale: 1 Inch = 100 Feet

May 13, 2019

Sheet 1 of 1

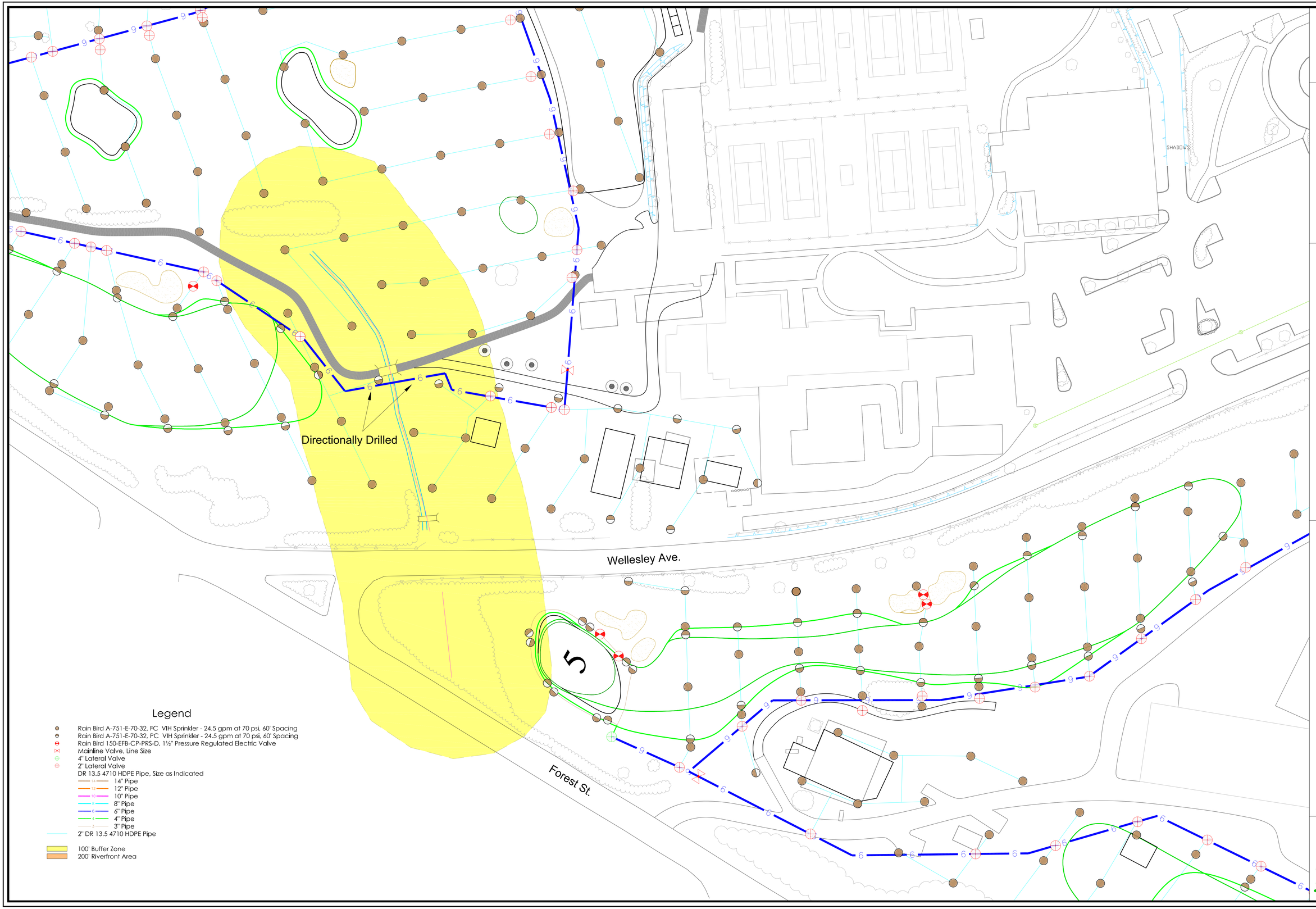
Hydraulic Layout

Wellesley Country Club

Wellesley, Massachusetts

PROFESSIONAL MEMBER
AMERICAN SOCIETY OF
IRRIGATION CONSULTANTS
Paul F. Granger Number: PR 1003

Aqua Agronomic Solutions, Inc.
Irrigation Analysis
Water Management
Landscape Design
P.O. Box 1020 • Chelsea, Ma • 02150-0020
Tel: (508) 730-1007 • Fax: (508) 730-1021



Hydraulic Layout

Wellesley Country Club

Wellesley, Massachusetts

Aqua Agronomic Solutions, Inc.
Irrigation Analysis, Mapping, Design
P.O. Box 5532 • Clinton, NJ • 08809-5532
tel: (908) 730-7887 • Fax: (908) 730-7921

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Scale 1 inch = 40 Feet

40 20 0 40 60 80

May 17, 2019
Sheet 2 of 6

Hydraulic Layout

Wellesley Country Club
Wellesley, Massachusetts

Aqua Agronomic Solutions, Inc.
Irrigation Analysis, Mapping, Design
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tel: (908) 730-7887 • Fax: (908) 730-7921

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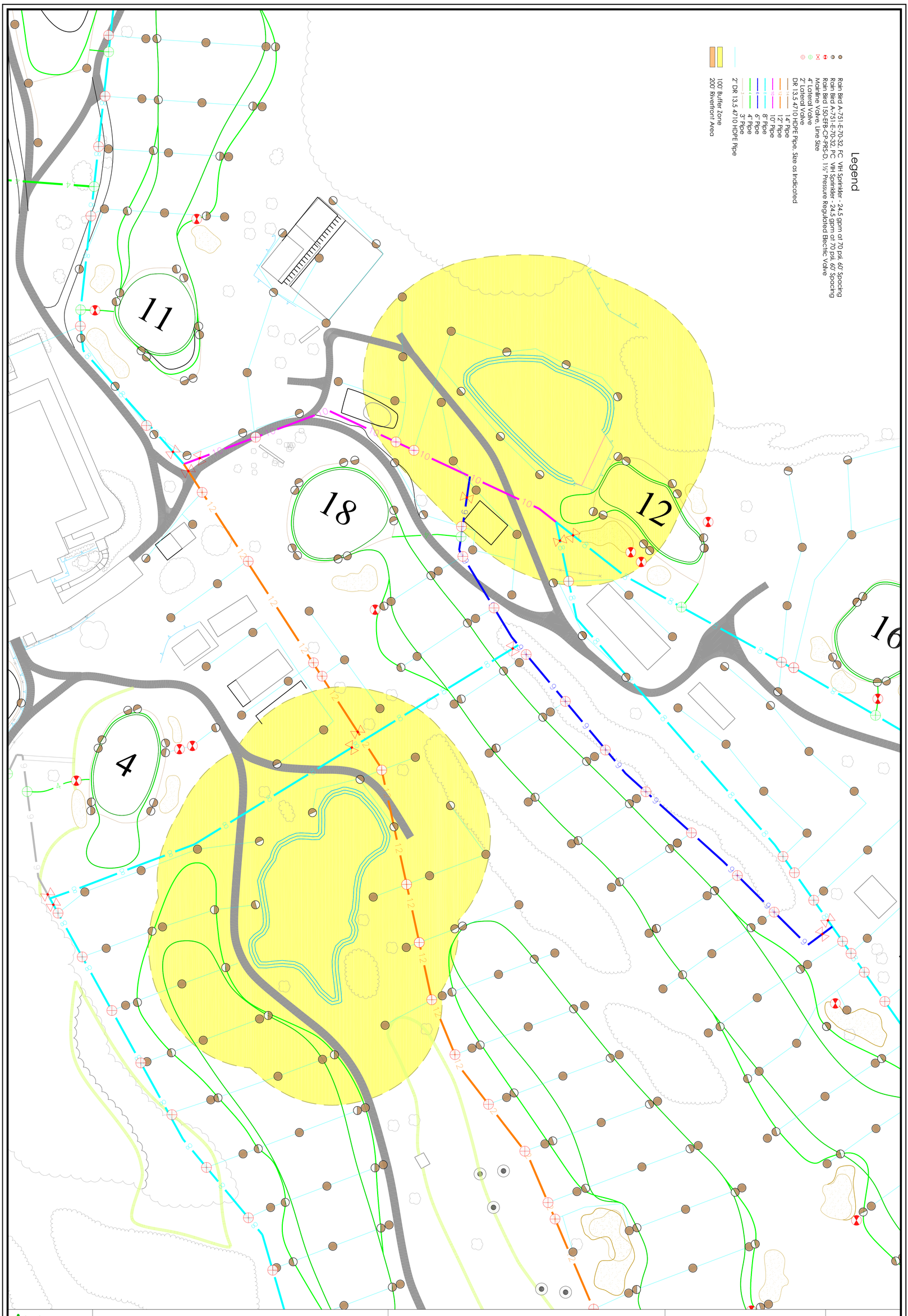

Aqua Agronomic Solutions, Inc.
Irrigation Analysis, Mapping, Design
P.O. Box 5532 • Clinton, NJ • 08809-0532
Tel: (908) 730-7887 • Fax: (908) 730-9321

Wellesley Country Club
Wellesley, Massachusetts

Hydraulic Layout

Scale 1 Inch = 40 Feet
40 20 0 40 60 80

May 17, 2019
Sheet 3 of 6

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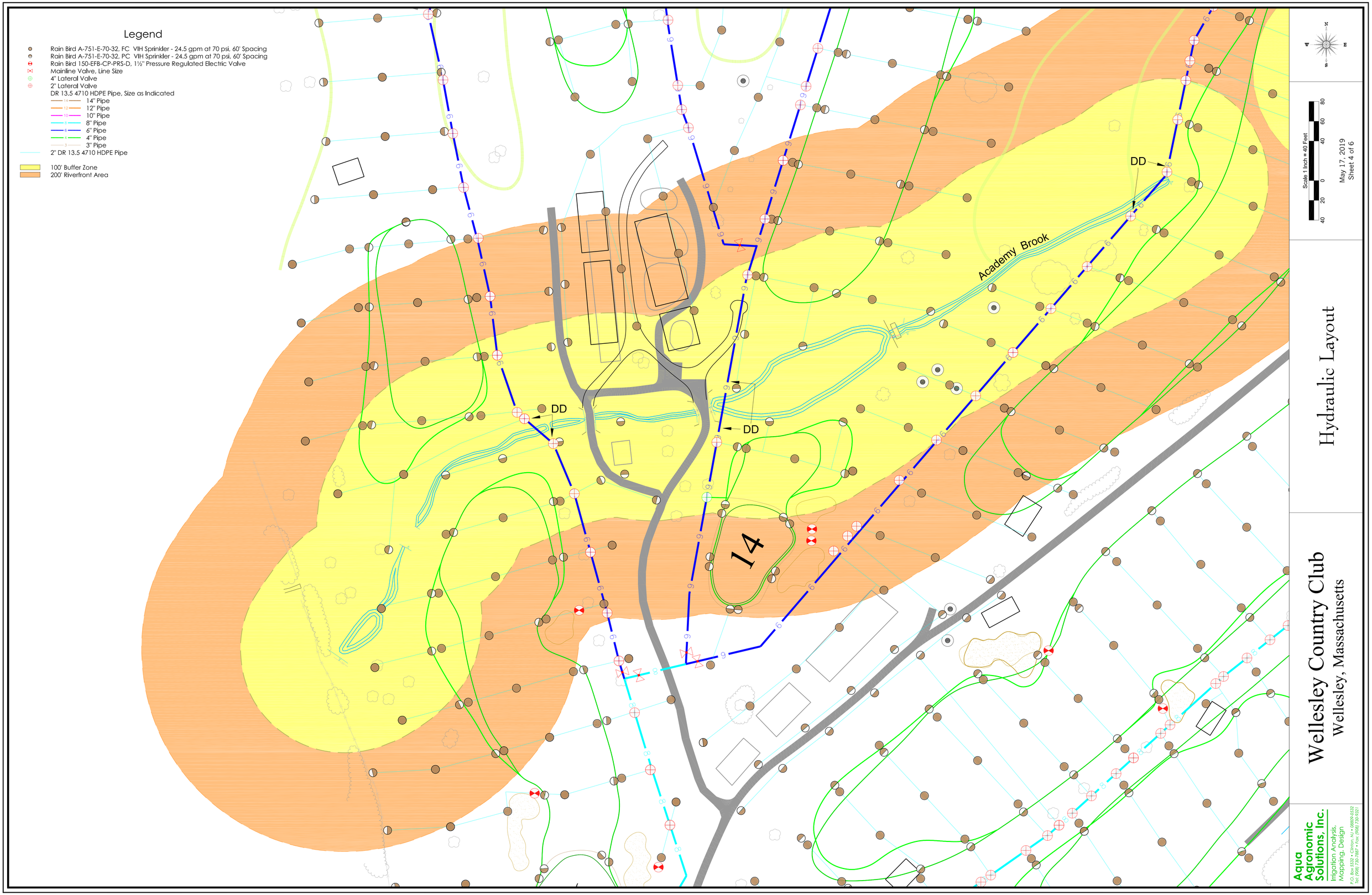
Legend
Rain Bird A-751-E-70-32, FC VIH Sprinkler - 24.5 gpm at 70 psi, 60' Spacing
Rain Bird A-751-E-70-32, PC VIH Sprinkler - 24.5 gpm at 70 psi, 60' Spacing
Rain Bird 150-EFB-CP-PRS-D, 1½" Pressure Regulated Electric Valve
Mainline Valve, Line Size
4" Lateral Valve
2" Lateral Valve
DR 13.5 4710 HDPE Pipe, Size as Indicated
14" Pipe
12" Pipe
10" Pipe
8" Pipe
6" Pipe
4" Pipe
3" Pipe
2" DR 13.5 4710 HDPE Pipe
100' Buffer Zone
200' Riverfront Area
Academy Brook
DD
DD
DD
14
Scale 1 Inch = 40 Feet
May 17, 2019
Sheet 4 of 6
Hydraulic Layout
Wellesley Country Club
Wellesley, Massachusetts
Aqua Agronomic Solutions, Inc.
Irrigation Analysis.
Mapping. Design
P.O. Box 5532 • Clinton, NJ • 08809-5532
Tel: (908) 730-2687 • Fax: (908) 730-9321
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Scale 1 Inch = 40 Feet

May 17, 2019
Sheet 5 of 6

Hydraulic Layout

Wellesley Country Club
Wellesley, Massachusetts

Aqua Agronomic Solutions, Inc.
Irrigation Analysis, Mapping, Design
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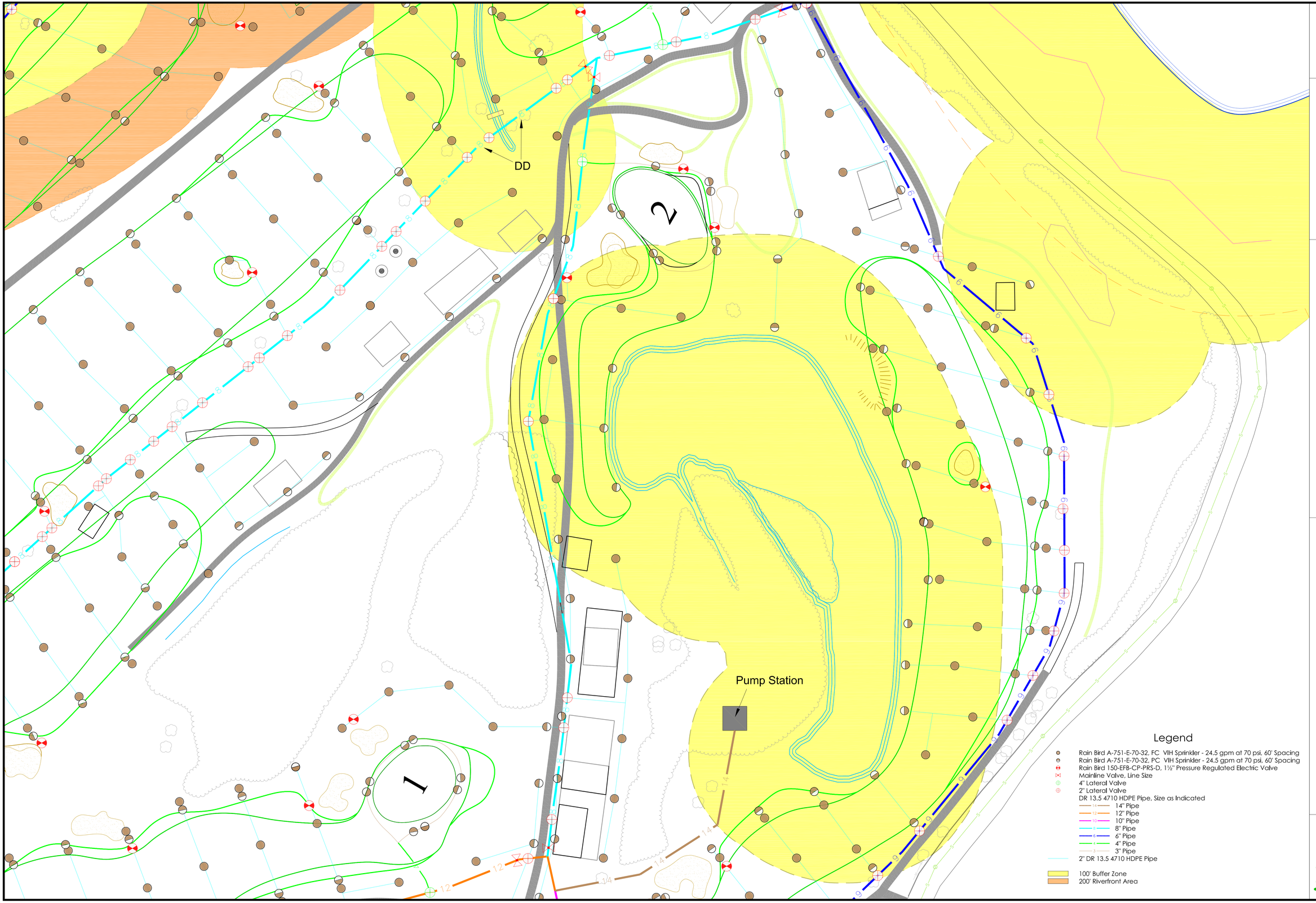

Hydraulic Layout

Wellesley Country Club

Wellesley, Massachusetts

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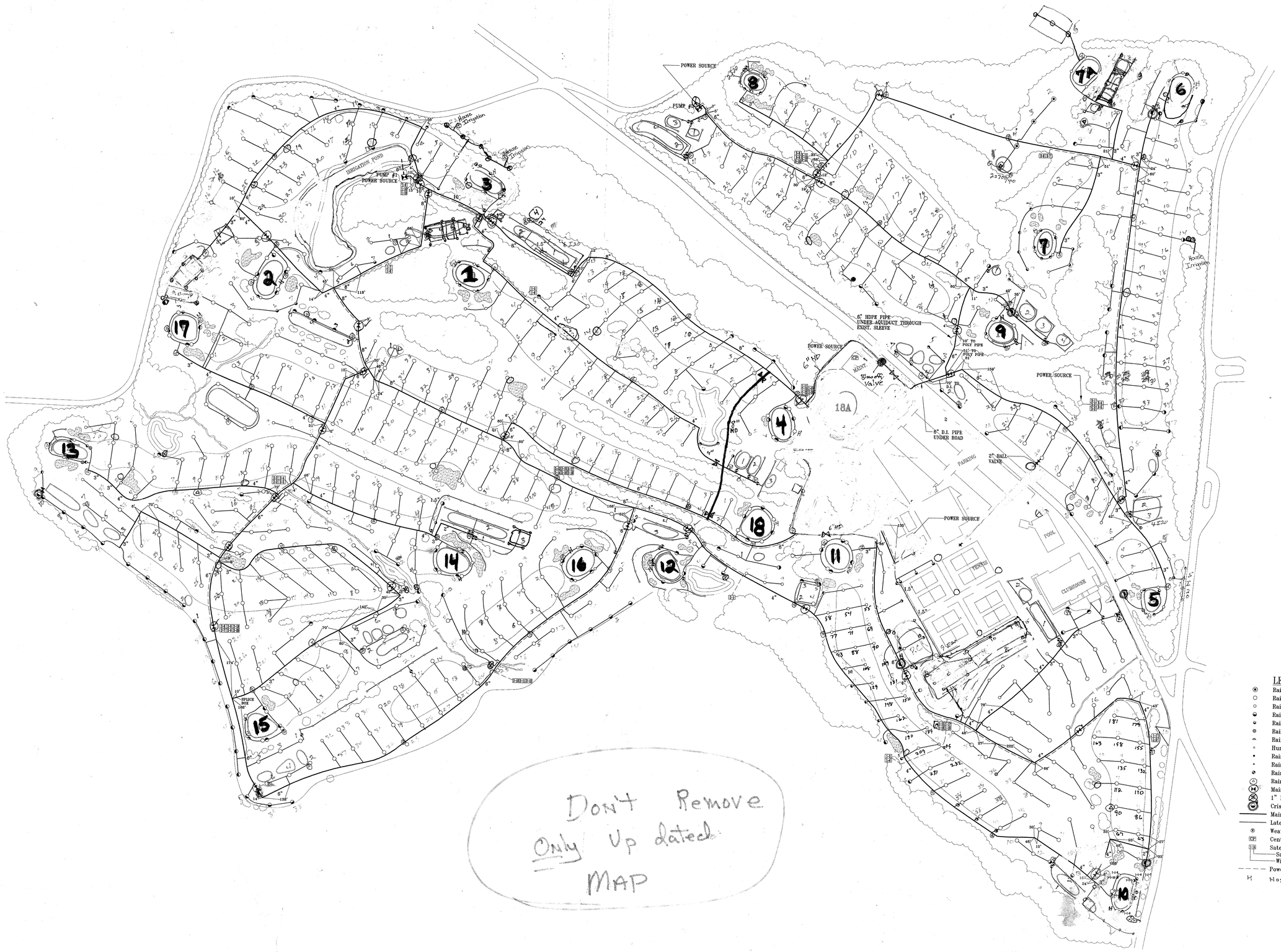

LEGEND

- Rain Bird #900E-32
- Rain Bird #700E-20
- Rain Bird #700E-14
- Rain Bird #750E-20
- Rain Bird #750E-14
- Rain Bird #500E-54
- Rain Bird #550E-54
- Hunter #I20-ADS-08
- Rain Bird #1804 Full Circle
- Rain Bird #1804 Part Circle
- Rain Bird EFA-CP-PRS-B 1.5" Electric Valve
- Rain Bird #5RC Quick Coupling Valve
- Main Line Isolation Gate Valve
- 1" Drain
- Crispin 1" Air Release Valve
- Main Line Pipe
- Lateral Pipe
- Weather Station
- Central Programmer
- Satellite Controller
  - Satellite ID Number
  - Wire Path Number
- Power Wire Path
- Hose

GRAPHIC SCALE

100 0 50 100 200 400

(IN FEET)
1 inch = 100 ft.

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MUNGEAM GOLF DESIGN

Mark A. Mungeam, ASGCA
Golf Course Architect

NOT FOR CONSTRUCTION

Wetland Delineations by:
Coneco Engineer's & Scientists, Inc.
October 2019

EXISTING SCORECARD

HOLE	BLACK	BLUE	B/W	WHITE	W/G	GREEN	RED	PAR
1	412	412	379	379	379	341	333	4
2	226	226	206	206	178	178	147	3
3	385	385	385	360	307	307	307	4
4	364	340	323	323	323	304	296	4
5	374	374	358	358	312	312	298	4
6	442	442	435	435	435	392	427	4/5
7	216	216	188	188	188	154	154	3
8	421	421	421	396	371	371	316	4
9	437	437	437	425	425	388	398	5
OUT	3,277	3,253	3,132	3,070	2,918	2,747	2,676	35/36
10	324	324	324	310	290	290	288	4
11	455	430	420	420	420	410	408	4/5
12	150	150	150	135	135	112	127	3
13	471	453	427	427	413	413	402	4/5
14	461	432	421	421	354	354	276	4
15	211	181	181	163	163	151	136	3
16	388	388	388	364	364	348	343	4
17	541	541	531	531	489	489	411	5
18	625	527	527	497	497	471	407	5
IN	3,626	3,426	3,369	3,268	3,125	3,038	2,798	36/38
OUT	3,277	3,253	3,132	3,070	2,918	2,747	2,676	35/36
TOTAL	6,903	6,679	6,501	6,338	6,043	5,785	5,474	71/74

BUNKER IMPROVEMENT CHART

LOCATION	BUNKER	WORK REQUIRED	SIZE (SF)	LOW (SF)	100' Buffer (SF)	200' Buffer (SF)
HOLE 1	A	RENOVATION	2,150	6,200	0	0
	B	RENOVATION	1,750	5,700	0	0
	C	RENOVATION	850	3,750	0	0
	D	RENOVATION	850	3,750	0	0
HOLE 2	A	RENOVATION	983	14,226	5,111	0
	B	NEW	528	0	1,318	0
	C	NEW	570	0	0	0
	D	REFURBISH	618	0	0	0
HOLE 3	A	NEW	1,279	11,841	4,060	0
	B	RENOVATION	1,150	3,800	0	0
HOLE 4	A	RENOVATION	776	3,069	1,343	0
	B	ELIMINATE	400	1,800	0	0
	C	RENOVATION	650	2,700	0	0
HOLE 5	A	REFURBISH	850	2,500	0	0
	B	REFURBISH	650	2,500	0	0
	C	REFURBISH	450	1,700	0	0
	D	REFURBISH	750	2,000	0	0
HOLE 6	A	NEW	1,500	5,200	0	0
HOLE 7	A	RENOVATION	550	3,000	0	0
	B	RENOVATION	500	2,500	0	0
	C	RENOVATION	850	3,000	0	0
	D	NEW	600	3,000	0	0
HOLE 8	A	NO WORK	0	0	0	0
	B	NO WORK	0	0	0	0
	C	NO WORK	0	0	0	0
	D	NO WORK	0	0	0	0
	E	NO WORK	0	0	0	0
HOLE 9	A	REFURBISH	500	2,000	0	0
	B	REFURBISH	1,100	3,200	0	0
	C	RENOVATE	1,200	4,500	0	0
	D	RENOVATE	1,500	5,600	0	0
	E	RENOVATE	1,100	4,000	0	0
FRONT TOTAL			24,654	101,536	11,832	0

LOCATION	BUNKER	WORK REQUIRED	SIZE (SF)	LOW (SF)	100' Buffer (SF)	200' Buffer (SF)
HOLE 10	A	REFURBISH	1,200	3,800	0	0
	B	REFURBISH	1,300	4,000	0	0
	C	REFURBISH	950	3,000	0	0
	D	RENOVATE	850	3,600	0	0
	E	REFURBISH	500	2,000	0	0
HOLE 11	A	RENOVATE	1,300	4,500	0	0
	B	REFURBISH	550	2,500	0	0
	C	RENOVATION	800	2,800	0	0
	D	REFURBISH	950	3,200	0	0
HOLE 12	A	REFURBISH	943	1,836	1,836	0
	B	REFURBISH	350	700	0	0
	C	RENOVATION	679	3,053	646	0
HOLE 13	A	RENOVATION	1,180	4,363	258	4,105
	B	REFURBISH	1,019	2,370	92	2,278
	C	RENOVATION	900	3,800	0	0
HOLE 14	A	RENOVATION	2,500	7,600	0	0
	B	REFURBISH	800	2,000	1,292	0
	C	REFURBISH	1,143	3,337	0	4,045
HOLE 15	A	RENOVATION	1,300	4,300	0	0
HOLE 16	A	RENOVATION	1,001	3,374	0	3,374
	B	REFURBISH	1,688	3,960	0	60
	C	REFURBISH	1,450	3,000	0	0
	D	REFURBISH	350	1,500	0	0
	E	REFURBISH	400	1,500	0	0
HOLE 17	A	RENOVATION	2,100	6,000	0	0
	B	NEW	900	4,200	0	0
	C	NEW	300	2,500	0	0
	D	NEW	1,067	4,856	0	593
	E	REFURBISH	514	1,956	1,956	0
	F	REFURBISH	450	1,956	1,956	0
	G	NEW	770	3,962	0	2,718
	H	RENOVATION	736	2,672	920	1,752
HOLE 18	A	RENOVATION	1,550	4,000	0	0
	B	REFURBISH	850	3,100	0	0
BACK TOTAL			33,340	111,295	8,956	18,925
FRONT TOTAL			24,654	101,536	11,832	0
GRAND TOTAL			57,994	212,831	20,788	18,925

Golf Course Architecture
MUNGEAM GOLF DESIGN, Inc.
195 South West Main Street
Douglas, Massachusetts 01516
508.873.0103

NO.	REVISIONS	BY	DATE
1	Preliminary Plan	MM	10/11/2019
2	Add Wetland Information	MM	11/13/2019
3	Add Soil Disposal/Rev Chart	MM	12/2/2019
3			

NORTH

PROJECT PLAN

1910

WELLESLEY COUNTRY CLUB
Wellesley, Massachusetts
BUNKER RENOVATION PROJECT

DESIGNED BY	DWG SCALE	DATE
MAM	1"=100'	09.02.19
DRAWN BY	CONTRACT NO	
GA		
CHECKED BY		
MAM		