



Arlington Conservation Commission

Date: December 3, 2020

Time: 7:30pm

Location: Conducted through Remote Participation using Zoom

Minutes

Attendance: Commission Members Susan Chapnick (Chair), Mike Gildesgame, Pam Heidell, Dave Kaplan, Nathaniel Stevens, Chuck Tirone (Vice Chair), and David White; Associate Commissioners Cathy Garnett and Doug Kilgour; and Conservation Agent Emily Sullivan. Representatives for the DPW NOI hearing included: Mike Rademacher (DPW), Jeff Alberti (Weston & Sampson), and Elena Compter (Weston & Sampson). Representatives for the Thorndike Place Working Session included: John Hession (BSC), Tood Undzis (BETA), Julia Stearns (BETA), Stephanie Kiefer (Smolak & Vaughn), Gwen Noyes (Oak Tree Development), Arthur Klipfel (Oak Tree Development), and Christian Klein (ZBA). Members of the public included: Adrienne Landry, Ann LeRoyer, Brian Rehrig, Dan Swanson, Mara Vatz, Patrick Hanlon, Tome Mason, Chris Vrotsos, Steve Revilak, Marina Popova, Mary Ellen Aronow, Kimberley Conant, Nancy Gray, Andy Forbes, David Barlow, Jennifer Griffith, Marci Shapiro-Ide, and Barbara Rowland.

11/19/2020 Meeting Minutes

The Commission discussed edits to the draft 11/19/2020 minutes. D. White motioned to approve the minutes as edited, P. Heidell seconded, all were in favor, motion approved. A roll call vote was taken. S Chapnick voted yes, M. Gildesgame voted yes, P. Heidell voted yes, D. Kaplan voted yes, C. Tirone voted yes, and D. White voted yes. N. Stevens had not yet joined the meeting.

General Updates

D. White updated the Commission that the DPW yard rezoning and capital requests had been passed at the recent Special Town Meeting.

Notice of Intent: 51 Grove Street, Arlington Department of Public Works

MassDEP File #091-0326

Documents Reviewed:

- 1) *DPW Facility 51Grove Street NOI, prepared by Weston & Sampson, dated October 22, 2020*
- 2) *Arlington Town Yard Facility 51 Grove Street NOI Plan Set, prepared by Weston & Sampson, dated October 21, 2020*
- 3) *Supplemental Materials for DPW Facility NOI, prepared by Weston & Sampson, dated 11242020*

Resource Areas:

- 1) *100-ft Wetlands Buffer*
- 2) *Adjacent Upland Resource Area*
- 3) *200-ft Riverfront Area*
- 4) *Floodplain and Floodway*
- 5) *Mill Brook*

This project proposes a new/renovated Municipal Facility to support the Department of Public Works (DPW), Inspectional Services Department (ISD), Facilities, and IT departments at 51 Grove Street. The proposed site includes the current 4.4-acre parcel, used by DPW / ISD, and an adjacent 1.4-acre portion of Town-owned land for a total of 5.8 acres. The site has Activity and Use Limitations (AUL) as defined by MassDEP due to site contamination, and therefore has contact barriers and engineered barriers (mostly pavement) per MassDEP requirements to prevent exposure to underlying contaminated soil. Sections of the site are within the 100-ft Wetlands Buffer, AURA, and 200-ft Riverfront Area of Mill Brook, as well as floodway and floodplain.

The Conservation Commission had a working session for this project proposal during its August 20, 2020 meeting. The public hearing for this NOI began at the Commission's November 5, 2020 meeting. During the November 5, 2020 meeting, the Commission requested the following supplemental materials:

- 1) Stormwater: on sheet c-6 0-3, replace stormwater unit 4 with catch basin
- 2) Stormwater: consider proprietary separator/treatment unit between Building D and berm where existing stormwater system is
- 3) Stormwater: consider adding canopy to materials storage area
- 4) Stormwater: consider grading materials storage area so sheet flow does not enter stormwater system
- 5) Vegetation: reconsider proposed ash trees, or develop management plan
- 6) Stormwater: update stormwater calculations with NOAA Atlas 14 Plus
- 7) Stormwater: update stormwater calculations with NOAA Atlas 14 Plus Plus
- 8) Stormwater: update specification language
- 9) Impervious Area: breakout impervious surfaces calculations into 200-ft Riverfront Area and 100-ft Wetlands AURA/Buffer
- 10) Stormwater: consider making the 80% TSS reduction in new impervious area a 90% TSS reduction
- 11) Amenities: consider opportunities for educational signage regarding stormwater improvements
- 12) Vegetation: strengthen statements of vegetation survivability, replacement, and maintenance; consider longer maintenance period than three years
- 13) Vegetation: include invasive management plan
- 14) Stormwater: consider increasing the proposed 44% TSS reduction in existing impervious area

Jeff Alberti from Weston & Sampson presented the supplemental materials and subsequent changes made since the November 5, 2020 hearing. The changes included:

- The Grading and Drainage Plan (sheet C-603) had been revised as requested by the Commission. A new catch basin is proposed in place of previously shown SWTU-4, and water quality unit was instead moved downstream of catch basin.
- The Grading and Drainage Plan (Sheet 603) had been revised as requested by the Commission. A new water quality unit had been added on the downstream of the existing drainage network, prior to discharging into Mill Brook.
- One Ash tree previously proposed on site had been replaced with a Hackberry tree (*Celtis Occidentalis*) as a more resilient alternative.
- HydroCAD model has been updated with NOAA Atlas 14 Plus Plus rainfall depths. Revised comparison table and HydroCAD analysis was provided. An analysis using NOAA Atlas 12 Plus rainfall depths had also been completed, and rainfall comparison table was provided as well. The following rainfall depths were used for NOAA Plus and NOAA Plus Plus rainfall:

	NOAA+ Rainfall (in)	NOAA++Rainfall (in)
2 – Year Storm	3.63	4.04
10 – Year Storm	5.79	6.43
25 – Year Storm	7.49	8.32
50 – Year Storm	8.72	9.69
100 – Year Storm	10.45	11.5

- Educational signage will be developed and displayed in the areas of proposed rain gardens showcasing LID measures implemented on site.
- The typical warranty period for new plantings is one year. Project specifications were revised to increase this warranty period to two years. After the warranty period, the DPW will be responsible for evaluating the health of the landscape areas each planting season, in the spring and the fall. Any unhealthy plantings identified by the DPW will be evaluated and replaced if necessary.
- The initially proposed 44% TSS reduction was able to increase to 47%, however due to the physical and environmental constraints of the site, a higher reduction rate was not feasible.

This project proposes high reflectance roofs on the buildings to mitigate for heat island effects. The proposed plantings and trees are also to mitigate for heat island effects.

D. Kaplan asked whether the NOAA+ and NOAA++ analysis changed the sizing of the proposed stormwater system. E. Compter stated that the additional NOAA+ and NOAA++ analysis did not change the sizing or redesign the stormwater system. The system was designed to manage a 25-year storm. D. Kaplan asked whether there was capacity onsite to enlarge the stormwater system. J. Alberti stated the system could not be enlarged because of the contaminated site and barrier, and constraints from the high pressure gas main onsite.

P. Heidell asked whether the stormwater system could be sized larger than the 25-year storm due to climate change impacts on increased precipitation. E. Compter stated that

Arlington requires a 25-year storm capacity and that a larger capacity would be cost prohibitive.

S. Chapnick asked for clarification on the proposed invasive removal method and whether the project was proposing to remove trees and grind down tree stumps.

C. Garnett stated that stump grinding was not necessary unless the stumps were hazardous or in a high traffic area. C. Garnett recommended permitting the same invasive management methods that were permitted in the AHS permit, which included the cut-and-dab method.

P. Heidell motioned to close the public hearing for 51 Grove Street, DPW Facility Renovation MassDEP File #091-0326, D. Kaplan seconded, all were in favor, motion approved. A roll call vote was taken. S Chapnick voted yes, M. Gildesgame voted yes, P. Heidell voted yes, D. Kaplan voted yes, C. Tirone voted yes, and D. White voted yes. N. Stevens had not yet joined the meeting.

The Commission discussed possible conditions and asked E. Sullivan to draft a permit for the Commission to deliberate during its December 17, 2020 meeting.

Thorndike Place Working Session

The Conservation Commission met with the Thorndike Place Applicant's Engineer (BSC Group) and the Town's Third-Party Reviewer (BETA) to review updated application materials related to wetland resources and stormwater in advance of the Zoning Board of Appeals' 12/10/2020 hearing. These updated materials included:

- Report on Existing Conditions (Section 3.2.6 of Arlington Comprehensive Permit Regulations)
- Architectural Drawings
 - 3D Perspective View (1 sheet)
 - Floor Plans (4 sheets) - Garage, Ground Floor, Typical 2nd/3rd, and 4th Floor
 - Exterior Elevations (3 sheets) showing all building sides with Material Legend and Type of Construction
 - Courtyard Section (1 sheet)
- Site Plans revised November 3, 2020 reflecting new building program presented at the October 13, 2020 public hearing
- Stormwater Report
- Wildlife Habitat and Vegetation Evaluation
- Updated wetlands delineation dated October 2020
- Updated waiver request list
- Statement of Compliance with Arlington's Master Plan, Housing Production Plan, and Open Space and Recreation Plan.

D. White recused himself from the working session.

S. Chapnick presented opening remarks about the process of the 40B Comprehensive Permit review under the ZBA and the roles of the ZBA and other Town permitting boards, including the Conservation Commission. S. Chapnick clarified that this is a Thorndike Place Working Session, not a public hearing, and the goal is to discuss changes to the project since the Commission's October 1, 2020 working session. She noted that while there will be an opportunity for the public to provide feedback directly to the Conservation Commission at the end of the working session, members of the public are encouraged to send comments directly to the ZBA.

The Applicant's Representative J. Hession presented the updated project proposal, comparing the September 2020 proposal to the November 2020 proposal. These changes included an updated wetlands delineation which found that the two Isolated Vegetated Wetlands were no longer resource areas. The project also proposes 2:1 compensatory flood storage outside of resource areas.

The Town's Third-Party Reviewer, BETA, summarized their review of the Applicant's updated comprehensive permit application. T. Undzis, BETA's civil engineer, reviewed the proposed stormwater system and stated that the roof system did not include all pertinent information needed for a complete review. T. Undzis stated that the 2:1 compensatory flood storage proposal looked accurate.

J. Stearns, BETA's wetlands specialist, stated that the wetlands delineation looked accurate. J. Stearns stated that the two areas identified as Isolated Vegetated Wetlands in the past currently did not meet the definition of Isolated Vegetated Wetlands due to lack of hydrologic characteristics and absence of wetlands vegetation. BETA did not conduct a subsoil assessment in these areas, but analyzed historic aerial photos and did not identify other filled wetlands.

J. Stearns summarized that the wildlife on the site was minimal urban wildlife semi fragment from other open spaces (e.g. Spy Pond, Alewife Brook). J. Stearns stated that overall BETA agreed with BSC's wildlife evaluation and confirmed that the building footprint was outside of wetlands resource areas.

S. Chapnick summarized the Commission's most recent comment letter, dated November 20, 2020. The letter made recommendations for five topic areas:

1. Wetlands Delineation
2. Floodplain and Compensatory Flood Storage
3. Stormwater Management
4. Evaluation of Wildlife Habitat and Vegetation
5. Conservation Restriction for Undeveloped of the Mugar Parcel

S. Chapnick stated that the isolated vegetated wetlands delineation did not have a thorough soils assessment and referenced the Town Engineer's comment letter dated December 3, 2020 recommending a more thorough soil assessment.

J. Hession stated that the wetlands delineation was conducted per MassDEP and Army Corps of Engineers standards. A request from the Commission to conduct additional soil assessment would go beyond industry standards and the requirements of a comprehensive permit application.

S. Chapnick stated that she was concerned with the location of the compensatory flood storage, and that the current homeless encampment area may be a better location.

S. Chapnick referenced future flood modeling conducted by the City of Cambridge, as well as Woods Hole Group. These models suggest flooding in this area will become worse due to climate change.

P. Heidell asked whether additional precautions should be taken onsite given the modeling.

T. Undzis stated that the proposed location of the compensatory flood storage area was agreeable due to its upland location. The homeless encampment area is closer to the Adjacent Upland Resource Area (AURA) and compensatory flood storage there would have a greater resource area impact. T. Undzis stated that the Applicant had sufficiently proven that 2:1 storage was feasible.

S. Chapnick stated that the Commission could recommend that the ZBA condition the permit for this project with a condition requiring the Applicant to re-vegetate or restore the compensatory flood storage area to add habitat value. J. Hession stated that the landscape plan calls out restoration and re-vegetation in the compensatory flood storage area. The planting plan would be developed with the Commission's guidance.

S. Chapnick stated that the rooftop stormwater system did not include enough information for review.

S. Chapnick stated that the existing ground water levels onsite need to be verified.

P. Heidell stated that ground water is usually highest in March and April. Given the specific schedule of 40B Comprehensive Permits, how would the water levels be accurately verified. P. Heidell asked how stormwater infiltration units could be sited without knowing the ground water level.

J. Hession stated that test pit assessments were conducted last week and confirmed that the proposed stormwater unit locations were appropriate. J. Hession stated that the soil drains better than the conditions the stormwater system was designed to.

S. Chapnick stated that the proposed stormwater system meets current State requirements for nutrient removal, but that the State will be updating the standards sometime in 2021. J. Hession stated that the stormwater system meets the current stormwater standards, but the Applicant may consider higher standards if there are no significant financial or logistical implications to the higher standards. S. Chapnick and P.

Heidell stated that the State will likely update the Stormwater Handbook to require that NOAA Atlas 14+ is used for stormwater calculations.

S. Chapnick stated that the ZBA's comprehensive permit regulations include a general statement about climate change, but does not include any climate change standards that could be applied to this project.

S. Kiefer stated that the Applicant may look at NOAA Atlas 14+ to recalculate the stormwater calculations, but ultimately the proposal has to comply with existing standards which do not require NOAA Atlas 14+.

N. Stevens stated that the ZBA has not granted any local waivers at this time, and that Arlington's local regulations require that the Cornell Method be used for stormwater calculations, not TP40 as required by the State Stormwater Handbook. J. Hession stated that the stormwater calculations used the Cornell Method.

S. Chapnick stated that the total number and size of trees impacted by the proposal had not been enumerated yet. S. Chapnick stated that the local regulations specify tree replacement quantities.

S. Chapnick recommended that the Applicant consider conservation stewardship mechanisms for the remaining open space onsite to ensure protection. An example of such a mechanism is a conservation restriction, similar to the Symmes Conservation Restriction.

C. Tirone asked whether the parking area in the western part of the site, close to homes, could be reduced. J. Hession stated that the setback in that area had been increased to provide more buffer between the neighborhood homes and that vegetative screening would be planted. J. Hession stated that area will be graded so no stormwater runoff enters the adjacent parcels. J. Hession stated that parking minimums are required for zoning, which determine the size of the parking areas.

C. Tirone asked for clarification on the lighting of the site. J. Hession stated that the lighting had not been designed yet, but that there are standards the lighting plan will follow given the proximity to neighboring homes.

C. Tirone asked about the site's sewer easement. J. Hession stated that the sewer easement will be protected during construction.

M. Gildesgame asked if the roof rain capture volumes had been calculated. J. Hession stated that those volumes had not been calculated yet and that the roof stormwater system is still under design.

The Working Session was opened for public comment.

Nancy Gray asked how the public could access the Mugar site. The Commission stated that the site is private and that without explicit permission from the property owner the public cannot access the site.

Brian Rehrig asked how the proposal was factoring in future flood risk. B. Rehrig stated that previously the Commission has rejected FEMA floodplain delineations and urged the Commission to review the validity of the floodplain.

Chris Vrotsos asked for examples of similar projects that protected or enhanced the environment and resource areas.

M. Gildesgame motioned to close the Commission meeting, N. Stevens seconded, all were in favor, motioned approved.

Meeting adjourned at 10:40pm.

DR