

D'AMORE DESIGN STUDIO * ARCHITECTS & PLANNERS, A.I.A.

PROPOSED PADDLE COURT EXPANSION AND NEW BUILDING:

BRONXVILLE FIELD CLUB

24 AKA 40 LOCUST LANE

~~FEBRUARY 16, 2023~~

~~March 22, 2023 UPDATE~~ *new items in italics.*

~~April 21, 2023 UPDATE~~ *also in italics since there was no April meeting*

~~May 30, 2023 UPDATE~~ *in italics and underlined*

Supplemental Information

We are pleased to present new information for your review.

1. Building Information

- a. The plans were revised for the March 1st meeting. The building was reduced 1' in width and 2' in length, and the covers porch area was reduced from 18' long to 16' long. The width was reduced 1' to match the width of the building. The new building size is 22' x 40.'
- b. The building height was increased to block the paddle court lighting from the south.
- c. *At the meeting, we were made aware that the open porch will allow light to spill to the south. We will have a custom screen fabricated to block the light from the porch on that open side. It will be presented on drawings that will be reviewed by the ARB in the next stage of the process. It will be akin to one of those 'good neighbor' fences, with finished board facing both sides, and be complementary to the building design.*

2. Lighting (this was submitted for the last meeting, but not presented at the meeting)

- a. An examination of the present site lighting was conducted and a report is attached. The plan shows the lighting levels to be code compliant, and the photos show that the existing lights are nearly invisible due to the screen of trees.
- b. The proposed Site Lighting Plans are attached, LE-101 and 102.

3. Sound (this was presented at the last meeting)

- a. In response to complaints about the noise of the paddle courts years ago, the Field Club installed Acoustiblok sound deadening materials against the 12' height of paddle court fences for the courts that face towards the neighbors.

4. Drainage

- a. ~~A new site drainage plan, L-102 was added to the set to illustrate the extensive sub-grade drainage installed under the expansion parking lot in that year. We have had some pretty severe weather events in the past two years and the club staff have noticed that the area no longer floods or has standing water even after 50-year storms.~~

- b. *There is a new Site Drainage drawing, C-101, that describes in detail the drainage related to the new building.*
- c. *A new Site Drainage drawing C-102 has been added in response to recommendations of planning board members that visited the site on March 28, 2023. Additional drainage is proposed below the expansion parking lot. The plan shows the existing drainage that was put in place in 2011.*
- d. ~~*There is a map and cover letter from our civil engineer describing the drainage pattern for the watershed that includes this neighborhood.*~~
- e. *With this submission there is a new letter and diagrams from the civil engineer.*

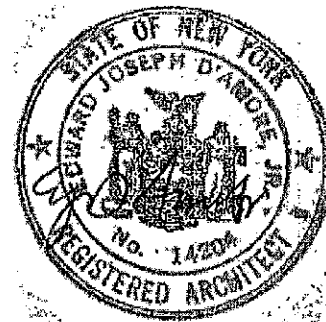
5. *Planting (there is no change from the presentation at the March meeting.)*

6. *Site Plan*

- a. *In response to the Planning Board Members' site visit, the proposed new fencing between the club and the neighbor to the west has been changed from chain link to faux wrought iron.*
- b. *The gravel expansion parking area will be altered with new cultec recharger drainage structures alongside the existing units. When the gravel is replaced, it will be graded evenly.*
- c. *With advice from the civil engineer and the landscape designer, the idea of creating a berm at the south west part of the property has been put aside. Too many mature trees would be killed by the addition of a berm since adding more than 6" of soil over the root system of a tree will slowly kill it.*

7. *Membership Information*

- a. *A description of the membership categories and numbers of members is attached.*



May 24, 2023

Mount Vernon Planning Board
City Hall – Roosevelt Square
Mount Vernon, NY 10550-206022

Re: 24 Locust Lane (Bronxville Field Club)
Section 159.81, Block 2032, Lot 2 in the R1-7 Zoning
de Bruin No. 6458

Dear Planning Board,

In accordance with your request at the May 3, 2023 Planning Board Meeting, I have done additional research and calculations with the purpose of better understanding the flooding complaints of the nearby neighbors of the Bronxville Field Club (BFC) – specifically at the south end of Burkewood Road. I had the opportunity to meet with two of the Club's neighbors (Gabriel Thompson and Joe Pisano) to get their insights on flooding. When this location floods, their rear yards also flood and in extreme conditions, such as Hurricane Ida, the flooding has reached into their front yards and homes. The total area draining to this location is approximately 17 acres – +/- 8 acres from the BFC and +/- 9 acres from the sub-division streets and properties.

Mr. Thompson shared with me a drawing from the 1930s showing the replacement of a creek that existed where the homes on the south side of Denman Place now are. The creek came out of the BFC property and apparently flowed west into Hunt Woods Park about 400' south of Central Parkway. The creek was replaced with a 15" pipe to allow for the construction of homes on Denman Place. The hydraulic capacity of the 15" pipe at 0.27% is 3.2 cfs. The implication is that this was the expected runoff from the BFC property.

The runoff from BFC can be reduced to the capacity of the 15" pipe by installing detention structures, such as Cultec units, on the property. The Table below shows data on the runoff for various storms.

Storm Recurrence Interval- Years	24 Hour Rainfall - Inches	Peak Runoff as Developed - CFS
2	3.41	9
5	4.30	14
10	5.13	17

Storm Recurrence Interval- Years	24 Hour Rainfall - Inches	Peak Runoff as Developed - CFS
25	6.49	24
50	7.76	30
100	9.28	38

The proposed additions to the Cultec system in the overflow parking lot would mitigate the runoff from entire property for the 5-year storm to the capacity of the 15" pipe on Denman. It is possible under future projects to add detention structures west of the pool building that can increase the amount of mitigation. See attached drawing.

Mr. Curtis Woods of the Dept. of Public Works shared with me record drawings of the drainage systems in the neighborhood surrounding the Bronxville Field Club.

The homes surrounding the low point at the south end of Burkewood Road are located adjacent to the area of the old creek that was noted above. To build the subdivision, the creek was replaced from the end of Burkewood to Raynor Avenue with a 15" pipe at an average grade rate of 0.77%. It joins the drainage system on Raynor that flows north to Vernon and then to Hunt Woods Park north of Central Parkway. The 15" pipe has a capacity of 5.7 cfs. Allowing for 3 cfs to be contributed from BFC, that leaves a capacity in this system of only 2.7 cfs for draining the surrounding streets and homes.

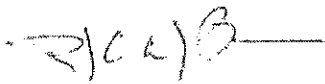
The low point at the south end of Burkewood collects runoff from approximately 9 acres of the surrounding streets and homes. The runoff from these 9 acres for the various storm sizes is as indicated in the table below.

Storm Recurrence Interval - Years	24 Hour Rainfall - Inches	Peak Runoff as Developed - CFS
2	3.41	12
5	4.30	17
10	5.13	21
25	6.49	29
50	7.76	36
100	9.28	44

May 24, 2023

The peak runoff from the 2 year storm is approximately 4 times the available capacity in the 15" pipe that runs the easements between Burkewood and Raynor. The 100-year storm runoff is about 16 times the capacity of the pipe. Based on this information, we can conclude that improvements at the Bronxville Field Club will mitigate the severity of the flooding at this location, but significant flooding should still be expected.

Sincerely yours,

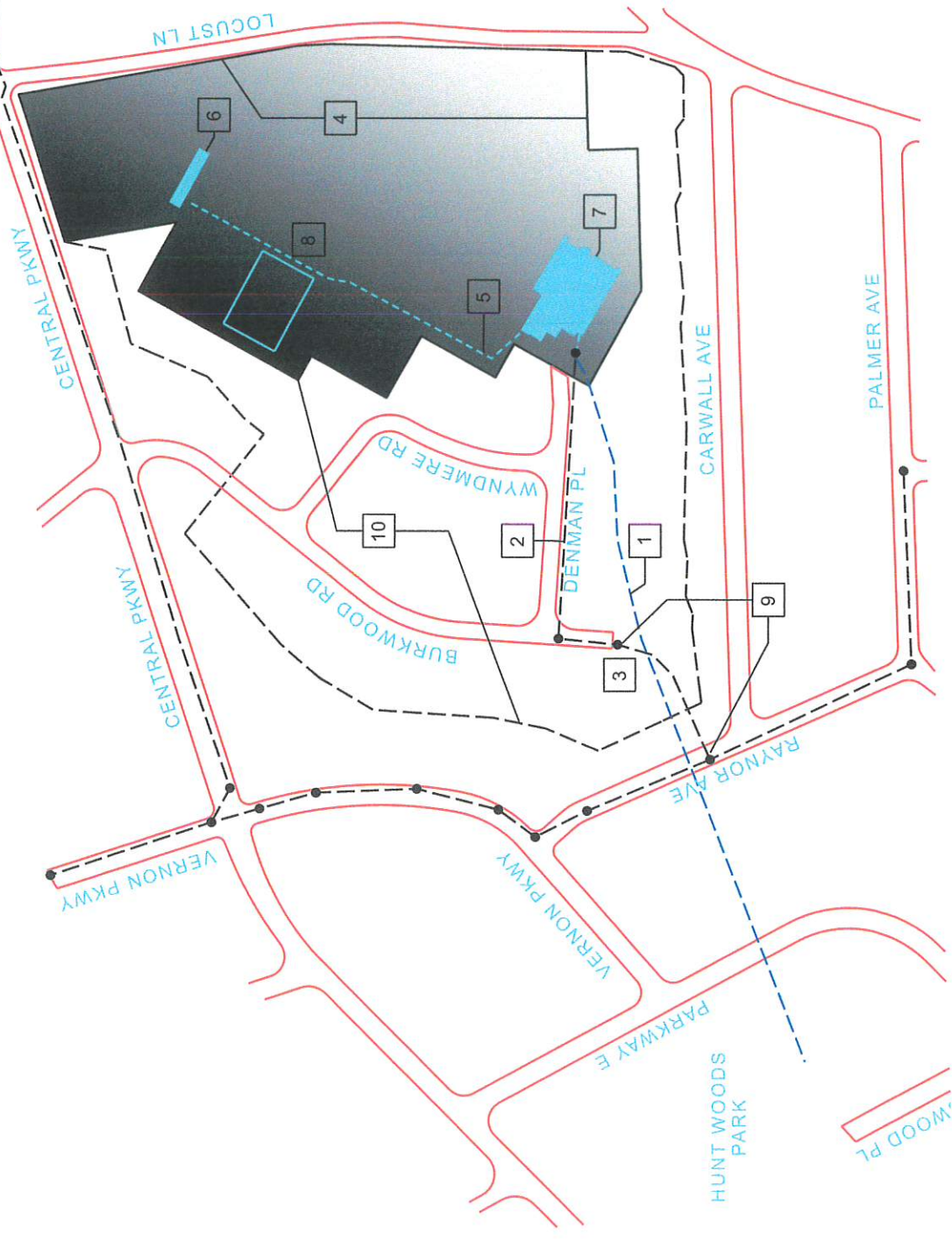
A handwritten signature in black ink, appearing to read 'R. de Bruin', followed by a horizontal line.

Robert W. de Bruin, P.E.

Attachments:

1. Drawing of Relocation of Creek
2. Master Drainage Plan

HOMESDALE RD



- 1 APPROXIMATE LOCATION OF OLD CREEK
- 2 15" DRAIN ON DENMAN
- 3 FLOODING AREA AT SOUTH END OF BURKEWOOD
- 4 BRONXVILLE FIELD CLUB WATERSHED - 8 ACRES
- 5 DRAIN PIPE THROUGH BFC
- 6 EXISTING CULTEC UNITS AT NORTH COURTS
- 7 EXISTING & NEW CULTEC UNITS UNDER OVERFLOW PARKING
- 8 POTENTIAL CULTEC UNITS WEST OF POOL
- 9 15" DRAIN FROM BURKEWOOD TO RAYNOR
- 10 NEIGHBORHOOD WATERSHED - 9 ACRES

BRONXVILLE FIELD CLUB

MASTER DRAINAGE PLAN