



TOWN OF CONCORD
COMMUNITY PRESERVATION COMMITTEE
 141 KEYES ROAD, CONCORD, MA 01742
 TEL. (978) 318-3290 FAX (978) 318-3291

Application for CPA Funding
Due no later than 4:00pm on Friday, September 17, 2021

Applicant: Dover Property Owners Association

Co-Applicant (if applicable): _____

Project Name: Restore White Pond Shore Drive Pedestrian Access

Project Location/Address: 5C Shore Drive, Concord MA 01742

Purpose: (Select all that apply)

- Open Space Community Housing Historic Preservation Recreation

Project Budget:

Amount of CPA Funds Requested: \$30,000

Amount from Other Funding Sources: \$30,000

Total Project Budget: \$60,000

(If multi-year project, note current phase only)

Please check which of the following is included with this Application:

- | | |
|---|--|
| <input checked="" type="checkbox"/> One Paragraph Project Summary * | <input checked="" type="checkbox"/> Timeline * |
| <input checked="" type="checkbox"/> Map (if applicable) | <input checked="" type="checkbox"/> Architectural plans, site plans, photographs (if appropriate) |
| <input checked="" type="checkbox"/> Narrative * | <input type="checkbox"/> Copy of Audit or most recent Financial Information (Non Profit Organizations Only)* |
| <input checked="" type="checkbox"/> Selection Criteria and Needs Assessment | <input type="checkbox"/> Letters of Support (if any) |
| <input checked="" type="checkbox"/> Detailed Project Budget * | |
| <input checked="" type="checkbox"/> Feasibility Assessment | |
| <input checked="" type="checkbox"/> Statement of Sustainability (if applicable) | |

* Required Documentation

The Contact Person for this Project is: Mark Weiler

All Correspondence should be mailed to: 8 Eaton Street, Concord MA 01742

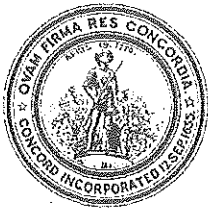
The Contact Person can be reached by phone at: 508-561-1874 or by email at: markweilerma@gmail.com

Signature of Applicant: *Mark Weiler* (ON BEHALF OF DPOA BOARD)

Signature of Property Owner (if different): _____

For Historic Preservation Projects Only – please check the box below left and acknowledge:

- I/We have read the U.S. Secretary of the Interior's Standards for the Treatment of Historic Properties and understand that planning for and execution of this project must meet these standards.



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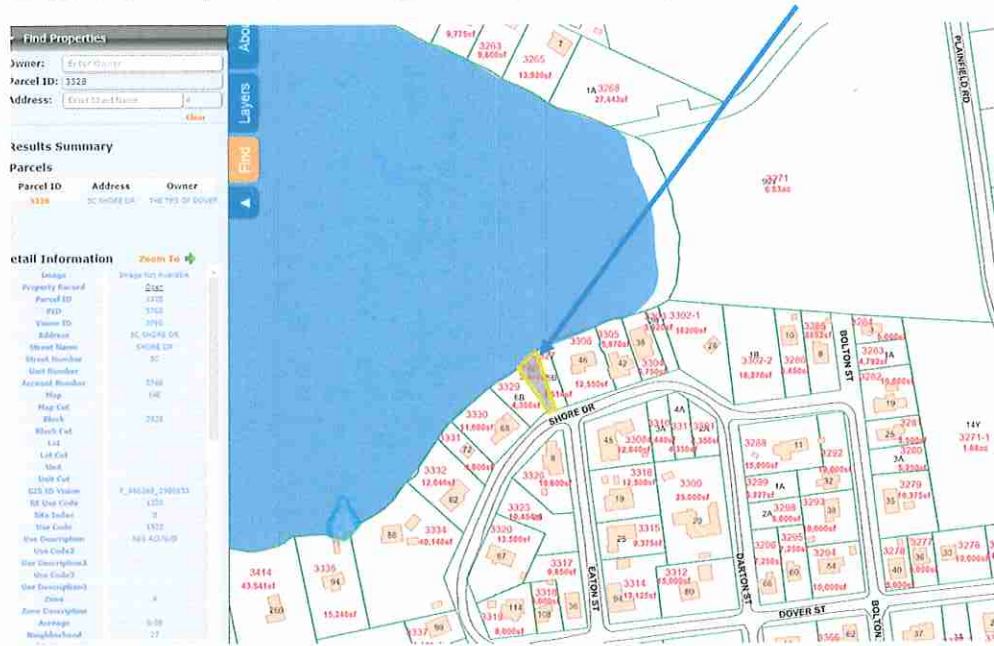
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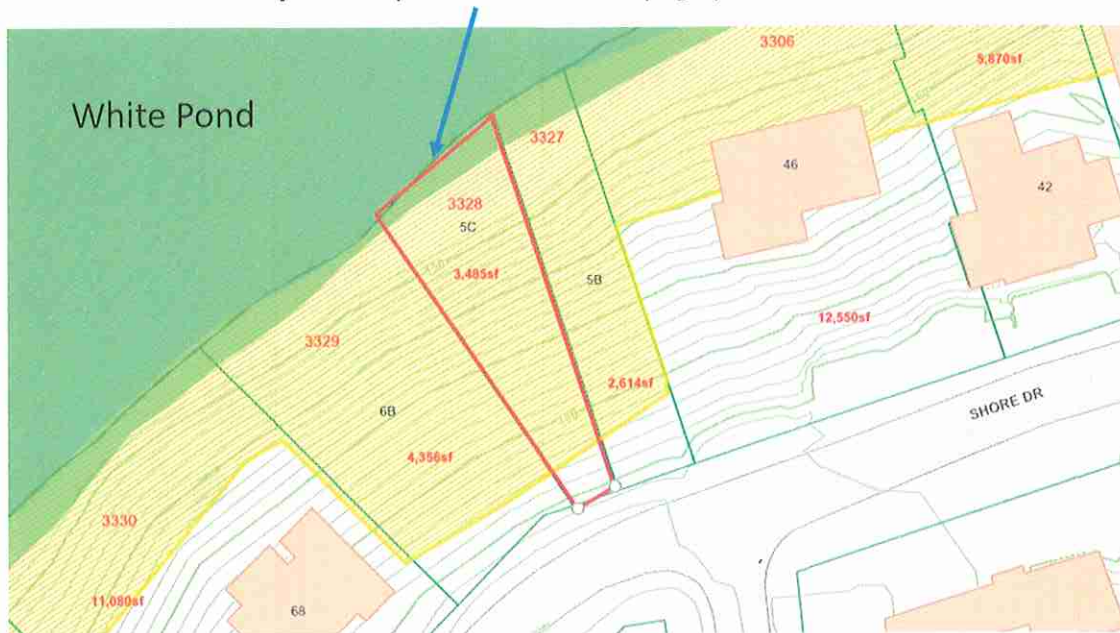
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Brief Project Summary: White Pond Shore Drive Pedestrian Right of Way Restoration – The Dover Property Owners Association is requesting funding assistance in the “Recreational Land – Rehabilitate/Restore” categories of Community Preservation Act to replace a 76-foot section of deteriorating timber steps on the public right of way from 5C Shore Drive with a set of “above ground” wooden steps and railings. Above ground mounted wooden steps and railings will ensure safe pedestrian access consistent with upper and lower portions of pedestrian access restored along the right of way in 2013. Total project budget is \$60K

Concord GIS Map: Pedestrian Right of Way located on parcel 3328 – 5C Shore Drive

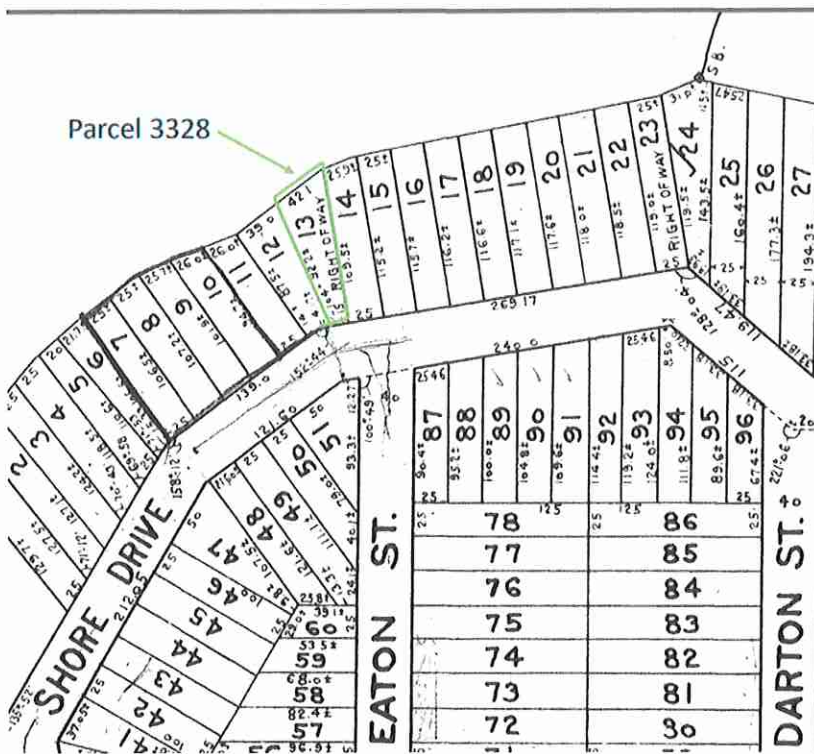


Other Concord GIS Map: Close up - 5C Shore Drive Topographical, Conservation & Recreation Overlays



Other Map: From 1931 Registry Plan Shown as Lot 13

Dover Property Owners Association – Parcel 3328 Right Of Way



Narrative / Background: Since at least 1970, a right of way intended for pedestrian access from Shore Drive to White Pond has been maintained under the auspices of the Dover Property Owners Association. For more than five decades the association has directed funding, installation, and incremental repair of an extensive set of wood timber steps and retaining walls descending a 26-degree sloped embankment of approximately 90 feet in length. All timber steps are in direct contact with a sandy loam type material. Unfortunately, the use of timbers in direct contact with soil makes them excessively prone to premature decay, and numerous seasonal frost/thaw cycles have caused steps to shift and pitch forward, requiring frequent soil disturbance as part of repeated efforts required to replace them. Most of the steps along a 76-foot mid-section portion of the right of way are now in need of urgent replacement. Use of the current steps is precarious for anyone who is not at least somewhat athletic, and simply not feasible for older individuals or those with limited range of motion.

Project Scope: The association seeks to fully replace the 76-foot mid-section of deteriorating steps with an above ground set of five-foot-wide pressure treated wooden steps and landings placed at one third incremental distances. Wood railings will be installed on both sides, and the entire structure will rest on pressure treated wood framing, stringers and braces attached to metal helical piles “screwed” into the slope. By utilizing metal helical pile foundation technology rather than traditional sonotube cement filled foundation construction methods, soil disturbance will be minimized to the greatest extent possible. The scope of work includes removal and disposal of all existing timber steps along the 76-foot section of steps, and installation of erosion control matting, and silt fencing and coir logs to prevent slope destabilization and nutrient loading into White Pond. A preliminary construction estimate using

the helical pile technology is \$54,960 based on a design prepared by Goliath Technology of Billerica Massachusetts. A more simplified design is expected to bring the actual construction expense in the range of \$44K. Please refer to the project budget for all estimated expenses. The association is seeking a CPA grant for 50% of the project cost (\$30K) with the remaining funding to be sourced via a planned capital campaign raising \$20K predominantly from property owners in the Pine Knolls subdivision, and accumulated funds collected from association members. The association has a current account balance of approximately \$10K.

Town Meeting Support: Town meeting support is anticipated based on a mutual desire to preserve and promote safe public access especially along right of ways offering recreational uses, and support restoration projects within a delicate watershed, fully respecting the need to use environmentally sustainable construction materials and design resulting in a structure with the longest potential lifespan. First responders and EMT's will have safe and reliable access to a section of White Pond a short distance from Shore Drive, rendering aid quickly without incurring risk of injury to themselves. Town meeting support is also anticipated due to recognition of the project expense being equally sourced from a CPA grant and funds raised by the Dover Property Owners Association.

The association firmly believes in the use of CPA as a smart growth tool to achieve community goals of enhanced access to recreation and open space, historic preservation and affordable housing. Restoring pedestrian access within an environmentally sensitive watershed in a responsible manner is our mutual goal.

CPC's Selection Criteria and Needs Assessment: This project will restore public access to White Pond for recreation and open space access. While not fully handicap-accessible due to narrow lot size and steep terrain, this project makes pedestrian access to White Pond more inclusive in a way that does so without displacing or removing any existing vegetation. The use of metal helical pile technology and erosion mitigation materials applied with great care is paramount to this success of this project. The overarching goal of this project is to have no environmental impact on the White Pond. While other projects may aim at restoring the health of the pond itself, this project seeks to work in harmony with the town and other civic minded groups to ensure this precious resource is preserved for open space and recreational enjoyment for many future generations.

While the right of way is not specifically owned by the town, the Dover Property Owners Association acknowledges and accepts its continual responsibility to care for and maintain of the pedestrian access without regard to association membership. The association acknowledges as well there is no legal basis to restrict the right of way to only association members, but remains very grateful to those members who help contribute to fund the care and maintenance of the property. There are about 35 contributing members of the association from one year to the next. The right of way should be restored to enable safe and reasonable pedestrian access by a range of people with different physical abilities. The ability to fund a project of this magnitude without Community Preservation Act funding is difficult from such a small base of association members. Without CPA funding, the association will be forced into implementing a stairs and railings project with a much shorter projected lifespan requiring frequent maintenance and associated environmental mitigations.

The association has previously demonstrated experience and organizational capability funding and contracting restoration of retaining walls and other sections of the pedestrian right of way as recently as 2013. The scope of the 2013 project was considerable and required fund raising efforts. However, the

CPA Application – Restore White Pond Shore Drive Pedestrian Right of Way – Recreation

need and scope of this new project outstrips the capability to fund more than 50% of it from association contributions. This project offers the opportunity to restore a portion of the access with a design solution offering an expected lifespan of 50 years. Going forward, the association will maintain the raised wooden stairway at their own expense.

The property is held by the Trustees of Dover Property Owners Association, and there are no issues or concerns relating to site control or ownership. The association pays taxes on the property, and has the authority to conduct these renovations consistent with the maintenance of this right of way. No land acquisition is associated with this request.

Project Budget: Total Project Budget = \$60K

White Pond Shore Drive Pedestrian Right Of Way Restoration Budget			
#	Expense Description	Amount	Expected Date
1	Preliminary Design - Goliath Tech Billerica MA	\$ 1,000	9/8/2021
2	Revised Design - Goliath Tech Billerica MA	\$ 1,000	10/15/2021
3	Contractor attendance at NRC Hearings (2)	\$ 500	TBD
4	Permitting, photocopying, certifications	\$ 500	TBD
5	Contractor correspondence with building department	\$ 500	TBD
6	Environmental Site Assessment Needs	\$ 3,000	TBD
7	Property Survey	\$ 3,500	10/15/2021
8	GoliathTech Construction including cost of materials and labor to remove, dispose of existing steps, install all required metal helical pile footings, PT braces, framing, stringers, treads, railings	\$ 44,000	09/19/2022-10/07/2022
9	Procurement and installation of coir logs, erosion management matting, and silt fencing	\$ 2,500	09/12/2022-10/10/2022
10	Contingency +/- Expenses	\$ 3,500	N/A
Project Expense Total		\$ 60,000	

Feasibility Studies: A recent preliminary design and construction estimate has been prepared, and a bid has been supplied by GoliathTech of Billerica Massachusetts for \$54,690. As of the time of this application, a more simplified design is being considered having the potential to further reduce materials and labor keeping the total project cost within a \$60K maximum. The association considered an alternate approach for rebuilding the steps in 2019, continuing to rely on timbers as steps in direct contact with gravel and soil similar to the installation of steps and railings at Sachem’s Cove White Pond. A bid from SUMCO ECO was obtained totaling \$63K in 2019. This option was considered to have too short a lifespan requiring significant maintenance within 10 to 15 years requiring many timbers to be replaced. SUMCO ECO also provided an estimate for realigning and adding timber steps and crushed stone to provide acceptable rise/run step ratio, excluding installation of railings for a price of \$11K in 2019. This solution was rejected as well due to a projected shorter life span requiring significant maintenance every 10 years, and failing to provide any handrails for pedestrian safety.

FURTHER ACTIONS REQUIRED:

1. A modified design and bid will be requested to obtain more precise project costing.
2. A property survey will be required confirming no abutting properties are infringed on.
3. The project will also require a detailed review by the Concord Natural Resources Commission Division of Natural Resources, and also require a determination of wetlands permitting,

CPA Application – Restore White Pond Shore Drive Pedestrian Right of Way – Recreation

adhering to regulations mandating no person may “remove, fill dredge, or alter” the land service, water, or vegetation in wetland.

4. No environmental assessments have been made. The footprint of the project site is entirely within an existing footprint of the site where timber steps are to be removed. No plants, trees or vegetation is identified as needing to be displaced or disturbed as part of the scope of the project.
5. A DEP permit with the Commonwealth of Massachusetts will be filed.
6. Since the proposed construction is proposed within 25 feet of a regulated wetland resource area, submission of a Waiver Request in accordance with Section 7.7 of the Concord Wetlands Bylaw will be submitted as deemed necessary.
7. An Architectural Design Exemption Waiver will be requested, acknowledging the limited width of the right of way combined with an average 26-degree slope prevents installation of any ADA compliant pedestrian access typically mandating a maximum slope of 4.76 degrees.
8. A capital campaign must be conducted by the association to obtain sufficient pledge commitments to ensure the proposed 50% CPA grant match is achieved.

Statement of Sustainability: The construction of an above ground set of wooden steps and railings from pressure treated material is anticipated to have a 50-year life span vs. pressure treated timbers in direct contact with soil lasting at most 20 years and requiring interim maintenance. Handrails constructed from composite decking material are being considered due to benefits of utilizing recycled materials and being “splinter free”.

The installation of metal helical piles located partially in an environmentally sensitive watershed within 25 feet of water requires no removal of soil whatsoever compared with installation of sonotube cement filled footings requiring removal of at least 4 cubic feet of material per piling. A minimum 20 pilings are required, sparing the need to remove 3 cubic yards of soil from the slope using the helical pile technology.

Timeline: Proposed Project Milestones

Date	Milestone
10/01/2021	Revised steps design build quote obtained from GoliathTech, Billerica, MA
10/15/2021	DPOA Capital Campaign Kick-off
11/15/2021	DPOA Capital Campaign Deadline
December 2021	CPC Vote on Project Recommendations
April 2022	Annual Town Meeting Vote On Project/Warrant Article
May 2022	Property Survey, Natural Resources Commission Review, other Board reviews and approvals, DEP Permit filing. Preservation or Public Access agreement signed.
June 2022	Capital Campaign Collection Deadline (funds available)
July 2022	Construction contracts signed and project scheduled (50% CPA Funds Required)
09/15/22	Work site is prepared – Demolition/removal of existing steps
10/01/22	Helical Pile installation Complete
10/15/22	Framing, Supports, Stringers, Decking, and Railings Installed. Long term soil stabilization mitigations implemented (Remaining 50% CPA Funds Required)

Architectural Drawings: Please see attached elevation and conceptual stairway plan. Please note a more simplified design is being considered, aligning the mid-section of the proposed staircase with the upper and lower section, resulting in significantly fewer metal pilings, fewer board feet of lumber and less labor required to install.

Project Site Photos: Stakes and string markings outline the expected footprint of the new steps



Steps to be replaced (facing White Pond)



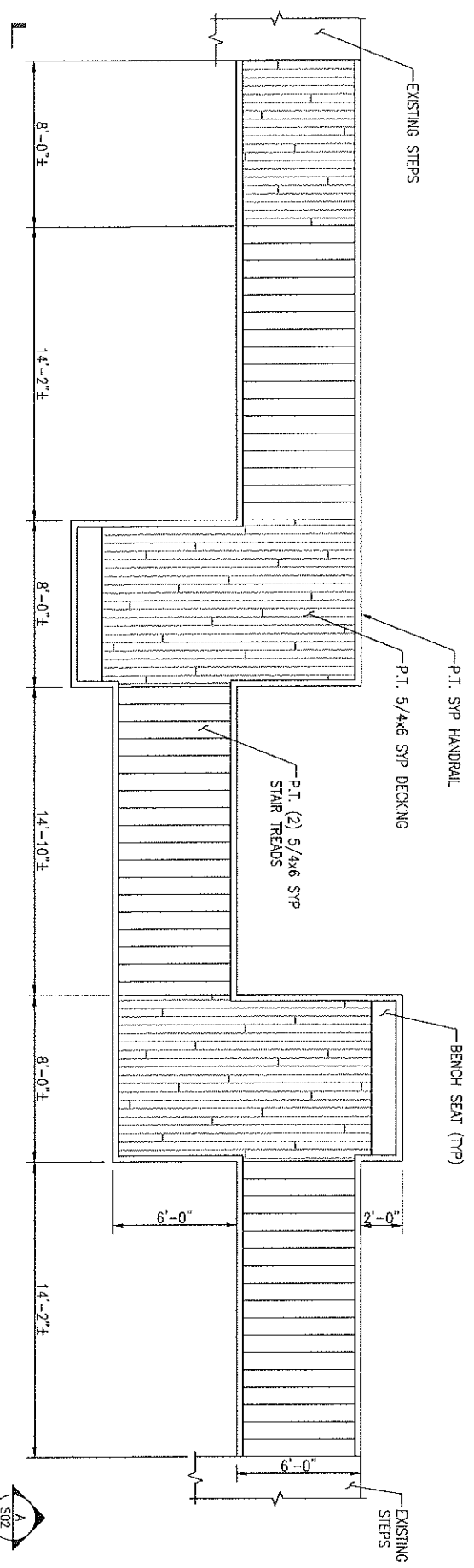
Steps to be replaced (facing Shore Drive)



Existing Timber Steps (Example #1)

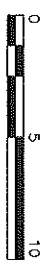


Existing Timber Steps (Example #2)



CONCEPTUAL STAIRWAY PLAN

SCALE: 1" = 5'



DATE: 2021 REVISIONS	CONCEPTUAL PLAN WHITE POND ACCESS STAIRWAY WHITE POND	SE ESCHER, PLLC 294 DENNETT STREET PORTSMOUTH, NH 03801 617-605-2034
	CONCORD, MA	

SHEET NO. S01
 1 OF 2