



# Town of Sudbury

## Conservation Commission

Department of Public Works Building  
275 Old Lancaster Road  
Sudbury, MA 01776  
(978) 440 - 5471  
Fax: (978) 440 - 5404

concom@sudbury.ma.us

www.sudbury.ma.us/conservationcommission

### TOWN OF SUDBURY CONSERVATION COMMISSION NOTICE OF PUBLIC HEARING

In accordance with the provisions of Article V(F), Section 5.C (Stormwater Management) of the Town of Sudbury General Bylaws, the Conservation Commission will hold a virtual public hearing on Monday, October 17, 2022 at 6:45 PM, regarding a Stormwater Management Permit application submitted by Hunter McCormick, Applicant, and Mayflower Council Inc., Owner, to rehabilitate trails, replace three existing timber foot bridges, install two new bog bridges, conduct minor regrading around existing cabins and associated improvements which will disturb approximately 54,391 square feet of land, including 10,379 square feet on slopes greater than 10%, with no net increase in impervious area on a 250.68 acre parcel located at 1 Nobscot Road (Assessor's Map L05-0007, L05-0001, L05-0003, L05-0004, L05-0005, L05-0200 and L06-0009).

Application materials are available in the Conservation Department and may be inspected during regular office hours.

Any person interested or wishing to be heard on the proposed application should appear at the designated time using this link: <https://us02web.zoom.us/j/98803339162> or by dialing in using 978-639-3366 or 470-250-9358 and entering the following meeting ID: 988 0333 9162.

Dave Henkels, Chair  
Sudbury Conservation Commission

---



HOWARD STEIN HUDSON

Received

SEP 23 2022

Sudbury Conservation Department

CONSERVATION COPY

RECEIVED  
AUG 19 2022

BY: .....

August 19, 2022

The Planning and Community Development Department  
Attn: Beth Suedmeyer  
Flynn Building  
278 Old Sudbury Road  
Sudbury, MA 01776

**Re: Nobscot Scout Reservation Trail Improvements Project  
Major Stormwater Permit**

Dear Beth:

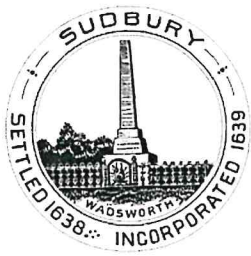
Howard Stein Hudson (HSH) is pleased to submit this permit application on behalf of the Mayflower Council for the improvements to Nobscot Trail system. The scope of work includes swale reconstruction; wetland restoration: minor regrading around existing cabins; adding stone on existing trails; and the replacement of three existing timber foot bridges and two new bog bridges.

The addition of new stone will be within the limit of the existing trails. No widening of any trails will occur within the project. A breakdown of the disturbed areas is provided in Table 1.0 (Disturbed Areas Impacts) attached to this application. The applicant is requesting that the review and approval of the Major Stormwater Permit be delegated to the Conservation Commission.

Sincerely,

James Downing  
Manager of Civil Engineering

Attachments: Major Stormwater Permit Application; Table 1.0 Disturbed Areas



Date Submitted: \_\_\_\_\_

Date Approved: \_\_\_\_\_

Permit #: \_\_\_\_\_

**TOWN OF SUDBURY  
APPLICATION FOR  
STORMWATER MANAGEMENT PERMIT  
Major**

**RECEIVED**  
**AUG 19 2022**

**BY: .....**

**Project / Site Information**

Project / Site Name: Nobscot Scout Reservation Trail Project

Project Street / Location: 1 Nobscot Road, Sudbury, MA 01776

Assessor's Map: L Parcel(s): Block 05, Lots 01,03,04,05,07,09

Plan Prepared by: \_\_\_\_\_ &200 Date of Plan: 7/29/2022

<b>Applicant</b>	<b>Owner</b> (if different from applicant)	<b>Contractor</b>
Name: <u>Hunter McCormick</u>	_____	_____
Address: <u>83 Cedar Street, Milford, MA 01757</u>	_____	_____
Phone: <u>508 217-4618</u>	_____	_____
E-Mail: <u>Hunter. McCormick@scouting.org</u>	_____	_____
Fax: _____	_____	_____

**Project Description/Features: (check all that apply)**

- Single family Dwelling
- Multi Family Development: # of Units \_\_\_\_\_
- New Commercial/Industrial Site Plan
- Re-grading or Land Disturbance
- Other Existing Trail & Cabin Improvements and foot bridge replacement
- Subdivision: # of Lots \_\_\_\_\_
- Redevelopment Site Plan

Total Lot Area: 250.68 Acres

Estimated Area to be Disturbed (ft<sup>2</sup>): 54,391

Total Area of Impervious Surfaces:	<u>Existing</u>	<u>Proposed</u>
(paved, parking, roofs, decks, etc.) (ft <sup>2</sup> ):	<u>0</u>	<u>0</u>

**Existing Project Site includes the following features:**

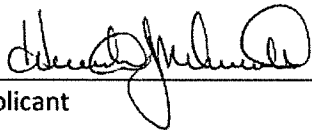
- Detention Pond
- Sub-surface Detention / Infiltration
- Roof drains discharging overland
- Perimeter drain
- Connection to municipal storm drainage system
- Illicit stormwater connection
- Slopes greater than 10%      Square Feet Disturbed: 10,379
- Slopes greater than 15%      Square Feet Disturbed: 610
- Slopes greater than 20%      Square Feet Disturbed: \_\_\_\_\_

**Other Jurisdictions:**

- Wetlands Protection Act / Conservation Commission Jurisdiction
- Rivers Act / Conservation Commission Jurisdiction
- Board of Health permit
- Site Plan Review
- Planning Board WRPD permit
- Earth Removal Board
- Driveway Permit
- Trench Permit

**Certification**

I hereby certify that I have reviewed the permit conditions listed above, and the information contained herein, including all attachments, is true, accurate and complete to the best of my knowledge. Further, I grant the Town of Sudbury Planning Board and its authorized agents permission to enter the property to review this application and make inspections during and after construction.



Applicant

Hunter McCormick (same as above)

Owner

8/19/2022

Date

Date

**Application Requirements**

1. The application submitted to the Town of Sudbury Planning Board must include the following:
  - Completed & Signed Stormwater Management Permit Application
  - Non-Refundable Permit Review and Inspection Fee (To be sent separately)
  - Eighteen (18) complete copies of the completed application with reduced size plans, 11 x 17, and 5 additional full size plans, PDF, Stormwater Management Plan, Erosion & Sediment Control Plan, prepared by a professional engineer licensed by the Commonwealth of Massachusetts, and including the minimum documentation listed in the Town of Sudbury Stormwater Management Bylaw and Regulations for more information.

2. Submit completed application and submission materials to:

Planning and Community Development Dept.  
 Flynn Building  
 278 Old Sudbury Road  
 Sudbury, MA 01776  
 (978)639-3387

**Table 1.0- Disturbed Area Impacts**

<b>NOI Plan Sheet Number</b>	<b>Sqaure Feet</b>	<b>Disturbed areas</b>
Sheet 3	10,485	Legion Cabin & Gen John Nixon Trail
Sheet 4	4,509	Swale impacts, Gen John Nixon Trail, & White Ridge Trail
Sheet 5	3,327	Monson Trail
Sheet 6	829	Monson Trail
Sheet 7	52	Sisson Trail, bog bridges
Sheet 8	242	Sisson Trail, bog bridges, Belden Bridge
Sheet 9	3,214	Webelo woods cabin & latrine, Muskie Trail
Sheet 10	53	Sachem Brook bridges
Sheet 11	296	White Ridge Trail
Sheet 15	6,340	Thirty Rod Road, Hayes Cabin
Sheet 16	6,185	Cabin 13, 14, Latrine & Pondview cabin, Gen John Nixon Trail
Sheet 17	11,175	Assabet Cabin, Gen John Nixon Trail
Sheet 18	3,513	Gen John Nixon Trail
Sheet 19	3,385	Ghost Trail, Nipmuc Trail, Upland Trail
Sheet 20	786	Nipmuc Trail
<b>Total disturbed area</b>	<b>54,391</b>	



October 11, 2022

Mr. Adam L. Duchesneau, AICP  
Director Planning and Community Development  
Town of Sudbury  
278 Old Sudbury Road  
Sudbury, Massachusetts 01776

Ref: Peer Review of Stormwater Management Permit Application  
Nobscot Scout Reservation Trail Improvement Project  
1 Nobscot Road, Sudbury, MA

Dear Mr. Duchesneau and Board Members:

The Horsley Witten Group, Inc. (HW) is pleased to submit this report to the Town of Sudbury regarding the stormwater management and erosion control measures proposed for the trail improvement project throughout the Nobscot Scout Reservation. The project is located on a 250-acre parcel with an anticipated area of disturbance being 54,391 square feet (sf). The Mayflower Council Boy Scouts of America (Applicant) has applied for a stormwater permit that includes several locations of trail improvements, primarily adding stone or replacing boardwalks within an existing trail network. The Applicant is not proposing to widen the existing trails, currently between 8-feet and 11-feet wide. In 2020 some maintenance was attempted that created an erosion problem along a few of the trails. The Applicant has included erosion control measures as well as some areas of stormwater management to repair the previously altered trails and slow the velocity of the runoff prior to flowing into adjacent wetlands.

The following documents and plans, were received by HW:

- Memorandum issued to the Town of Sudbury Conservation Commission, prepared by Howard Stein Hudson, dated August 1, 2022 (16 pages);
- Letter to The Planning and Community Development Department, regarding Nobscot Scout Reservation Trail Improvements Project, prepared by Howard Stein Hudson, dated August 19, 2022 (4 pages);
- Stormwater Pollution Prevention Plan (SWPP), for Nobscot Scout Reservation Trail Project, prepared by Howard Stein Hudson, dated August 2022 (288 pages); and
- Site Plan for Nobscot Scout Reservation Trail Project, Sudbury and Framingham, MA, prepared by Howard Stein Hudson, dated August 1, 2022 (21 sheets).

As part as our review HW conducted a site visit with the Applicant's team and members of the Sudbury Conservation Commission on September 9, 2022. To simplify our review HW has provided comments on the proposed trail improvements project referencing the sheet number of the Site Plan set.



**Sheet 1 of 21: Cover Sheet** (no comments)

**Sheet 2 of 21: Key Plan** (no comments)

**Sheet 3 of 21:** Legion Cabin and Gen John Nixon Trail station 112+00 to 118+00.

- Applicant proposed to remove 12 inches of soil build up for 20 feet on north, south and west side of Legion Cabin. Applicant should grade newly disturbed area away from building.
- HW understands basement is wet. Drip edge proposed for roof runoff, if feasible consider adding perforated pipe to pull roof runoff further away from building. Where grass is removed replace with mulch to the extent feasible.
- Area noted to remove rocks and regraded adjacent to Station 114+50 may not be necessary if for aesthetics only. Once remove vegetation in this area invasives could become a problem.
- Review use of firewood in Conservation Restriction, may be okay to use down trees but this should not be considered an automatic approval.
- Culvert northeast of cabin at Station 112+00 should be cleaned out when working in this area. Proposed fill should not extend into wetlands but remain on path.
- Rocks at high point of Gen John Nixon Trail around Station 115+50 have been removed causing some erosion. Slope on north side of trail could become unstable. Consider means to support slope during Phase 1 improvements. This may require heavy equipment and not be feasible for volunteers to do by hand.



*Section of Gen John Nixon Trail to be stabilized. Photo taken 9/9/22.*

**Sheet 4 of 21:** White Ridge Trail station 119+00 to 125+00.

- Work to be conducted in Phase 1 of trail improvements. Consider adding 3 to 4 water bars between Stations 121+25 and 123+50 to direct runoff towards the east.
- Excessive sediment on trail to be removed.
- Significant washout visible in wetland series M1-M12. Resource area is larger than noted on plan and sediment traveled a good distance. Should remove sediment by hand.

- Drainage Swale-2 at Station 123+00 does not appear to be needed. Allow area to revegetate.
- Concern with invasives within swales after land disturbance. Hydroseed immediately and monitor.
- During site walk discussed closing trail adjacent to wetland series M1-M12 temporarily while addressing erosion issues at this intersection.
- Level spreader may be needed around Station 124+25 to slow flow and reduce erosion.
- Crushed stone bed may be needed between Station 124+50 and 125+00.
- Applicant to review all areas of land disturbance. Areas where grades are changing, and swales created in uplands should be considered a permanent impact and not temporary.



*Section of White Ridge Trail that needs sediment removal. Photo taken 9/9/22.*

**Sheet 5 of 21:** Madison Trail Station 400+00 to 407+00.

- HW recommends installing water bars along trail with professional oversight.
- Crushed stone to be super elevated on southern edge.
- Sediment in path around Station 403+75 should be removed and replaced with stone. Document where sediment that will be removed will be placed temporarily and permanently.
- Washout visible around Station 404+50 should be removed by hand.
- Crushed stone should be extended to approximately Station 404+60 at larger boulder.

**Sheet 6 of 21:** Monsoon Trail Station 408+00 to 418+00

- Recommend adding water bars between Station 411+00 and 412+00

**Sheet 7 of 21:** Ellis Land Trail in Framingham (no comments)

**Sheet 8 of 21:** Legion Trail Station 1+00 to 8+00

- Placement of 6-foot-long concrete footings for wooden platform at Station 1+00 to be done by hand. Other footing types instead of heavy concrete footings may be considered.
- Applicant to review all areas of land disturbance. Areas within wetlands receiving stone should be considered a permanent impact and not temporary.



- Erosion controls within wetlands should not include trenching of silt fence. Okay to weigh down with silt sock. Measures to be taken to protect turtles during construction.
- Applicant can get vehicles to largest bridge replacement between Station 7+00 and 8+00. Plan to widen this bridge.
- Additional comments on listed under Sheet 20 of 21.

**Sheet 9 of 21:** Muskie Trail Station 9+00 to 15+00

- HW believes trail mislabeled on plan and should be Legion Trail not Muskie Trail.
- Applicant to review all areas of land disturbance. Areas within wetlands receiving stone should be considered a permanent impact and not temporary. Culvert crossing is permanent impact.
- Invasive species in this area are a concern, including poison ivy, specifically north side of trail for 25 feet beyond proposed grading, south side is also a problem but not as severe. Invasive management plan should be reviewed with Conservation Commission. Replant disturbed area with shrubs and spray seed mix. Weed Warrior program was discussed. Applicant should explain how it intends to restore the temporary impacts to the wetlands in this area.
- There is a trail to the Peabody Camp site. Questions were raised during site walk on how this trail is accessed by the campers with special needs.
- Work around latrine includes stone trench. Should be placed at roof drip line and not adjacent to building.
- Work around Webelos Woods Cabin 5 includes excavating large rocks. Recommend leaving rocks as it appears difficult to remove them by hand and the need to remove is not obvious. Recommend adding a stone trench at drip line west side of cabin.



*Invasive species along trail and large rocks at Cabin 5. Photo taken 9/9/22.*

**Sheet 10 of 21:** Little Sachem Brook Bridge. Legion Trail station 16+00 to 17+00

- Bridge replacement to be included in Phase 1 improvements. Bridge will be built onsite.
- Concrete footings may be difficult to carry to this location. Applicant may want to consider helical piles.
- When calculating disturbance consider footings permanent disturbance while bridge is temporary disturbance.



- Keep utility pole acting as headwall.
- Extend bog bridge or add stone for another 8 feet around station 16+75.



*Little Sachem Brook Bridge to be replaced. Photo taken 9/9/22.*

**Sheet 11 – 13 of 21:** Jethro Trail in Framingham (no comments)

**Sheet 14 of 21:** Ellis Land Trail in Framingham (no comments)

**Sheet 15 of 21:** Thirty Rod Trail station 100+00 to 110+00 (no comments)

**Sheet 16 – 18 of 21:** Gen John Nixon Trail station 200+00 to 226+00

- Applicant to review all areas of land disturbance. Areas within wetlands receiving stone should be considered a permanent impact and not temporary.

**Sheet 19 of 21:** Ghost Trail and NIPMUC Trail (no comments)

**Sheet 20 of 21:** NIPMUC Trail station 314+00 to 319+00 and Belden Bridge

- Applicant intends to remove utility pole and fill void left by pole with precast concrete footing.
- Area that appears to be used by dogs to access stream should be planted with native vegetation that will discourage access. Within or adjacent to proposed wetland mitigation area.



*Utility pole footing to be replaced and wetland mitigation area. Photo taken 9/9/22.*

**Sheet 21 of 21: Details**

- Stone proposed to be placed on paths should be  $\frac{3}{4}$  inch to 1  $\frac{1}{2}$  inch crushed stone.
- Stone to be used in check dams should be a minimum of 3 inches.
- On Water Bar Section detail add depth of lip.
- Add silt fence detail with weighted silt sock.

HW recommends that the Conservation Commission review these comments with the Applicant and that the final plan set address the items discussed. HW recommends that the Applicant verify all land disturbance noted for accuracy. HW discussed these comments and suggestions with the Applicant's team on September 9, 2022 during the site walk. Please do not hesitate to contact me at 857-263-8193 or at [jbernardo@horsleywitten.com](mailto:jbernardo@horsleywitten.com) with any comments or questions.

Sincerely,

**Horsley Witten Group, Inc.**



Janet Carter Bernardo, P.E.  
Associate Principal

CC: Sudbury Conservation Commission