

Chesley Appeal 2020



Exhibit 8

William Butler
Code Enforcement Officer
Town of China
ceo@chinamaine.org
571 Lakeview Drive
China, Maine 04358

4/13/20

RECEIVED
APR 09 2020

Sent email to
Brett Chesley to
resubmit with P Baynes and \$100

Re: 83 Fire Road 9, China Maine 04358 – Permit Application

Dear Bill:

I have enclosed our application to construct a granite faced steel sheet-pile retaining wall adjacent to China Lake and am providing the following additional information in support of that application. I have also enclosed the application fee.

1. Introduction

The condition of the existing lakefront riprap slope on our property is unstable. The silty clay material under the riprap and granite stairs is eroding from underneath which is introducing sediment into the lake. The erosion is caused by both high velocity storm water runoff and soils that are highly susceptible to freeze thaw cycles. The purpose of the project is to: (1) stabilize the failing slope at the shoreline of China Lake; (2) stabilize the shoreline; and (3) control the erosion and sedimentation. Because the retaining wall required Maine Department of Environmental Protection ("MDEP") approval, permitting for the project was broken down into phases.

Existing Permit: Regrading and landscaping for erosion control and sedimentation control behind the proposed retaining wall shown on the plan attached to the permit issued by the Town of China (Permit, No. 2019-103) on September 16, 2019 (the "Original Permit"), a copy of which is attached as **Exhibit A**.

New Permit: Construction of a Granite Faced Steel Sheet-pile Retaining Wall in accordance with the permit issued by MDEP (No. L-28372-2A-A-N) on October 23, 2019, a copy of which is attached as **Exhibit B**.

We are now seeking the permit for the construction of the retaining wall for the purposes of erosion control pursuant to Section 5.B.VIII of the Town's Land Development Code (the "Code"). Except for constructing it landward at the normal high water mark as required by the MDEP permit, the retaining wall will be constructed in same general location as shown on the plan for which the Original Permit was issued. After construction of the retaining wall, the

property will be regraded in accordance with the Original Permit which will require less than 100 cubic yards of filling and earth moving as shown on Exhibit C.¹

2. Current Conditions

The previous owner of the property received a MDEP "Permit by Rule" to install riprap on the slope to stop erosion and attempt to stabilize the waterfront slope and shoreline in 1999, a copy of which is attached as Exhibit D. The riprap with a row of granite blocks at the toe of the slope, which is also the high-water mark, and a set of granite stairs for access was installed in the fall of 2000 during low water. Since we bought the property in 2004, this slope has been sloughing and eroding from underneath the riprap and granite stairs into the lake. This is obvious by the "sinkhole" depressions in the slope and the excessive movement of the granite stair tread shown on the photos attached as Exhibit E.

3. The Phase 2 Design

We engaged Albert E. Hodsdon III, P.E. to develop a solution that would result in a stable shoreline, free of standing water and provide adequate access to the lake and to accomplish these goals with minimal impact to the resource. Mr. Hodsdon and his staff at A.E. Hodsdon Consulting Engineers have an excellent and longstanding reputation for assisting state agencies, municipalities, and private clients with similar applications. Mr. Hodsdon prepared the NRPA permit application attached as Exhibit F. After site visits, responding to questions, providing additional information, and revising the plans for the retaining wall addressing concerns raised by MDEP staff and others, the MDEP issued the NRPA Permit on October 23, 2019, attached as Exhibit B. A copy of the plans reflecting the construction of the retaining wall in accordance with the NRPA Permit is attached as Exhibit G.

One of MDEP's primary concerns was that the original plan for the retaining wall showed that it extended beyond the existing normal high-water line. *That concern was addressed by the revising the plans.* As the MDEP stated "The proposed retaining wall will be located adjacent to the great pond, essentially maintaining the points where the existing granite block touches the high-water mark." Exhibit B, p. 1. That condition is shown on Sheet 2 of the plans² which shows that the lakeside edge of the retaining wall does not extend beyond the existing high-water line. Exhibit G, Sheet 2.

The MDEP recognized the purpose of the retaining wall was to stop the erosion that is currently occurring and reviewed the alternatives: (1) taking no action; (2) replacing the existing riprap with new riprap; (3) the retaining wall as originally proposed; and (4) the retaining wall "outside

¹ I studied Civil Engineering Technology at the University of Maine and have nearly 30 years of experience in heavy construction, including Slope and Shoreline Stabilization on Lakes, Rivers, Streams and Tidal water bodies, and am certified by MDEP in erosion control.

² The plan has been revised to comply with the conditions imposed by the MDEP under the NRPA Permit.

the lake”.³ Exhibit B, p. 7. MDEP agreed with the selection of the retaining wall concluding that “the applicant considered multiple alternatives and selected an alternative that meets the project purpose and avoids impacts to the resource.” *Id.* Because the purpose and location of the retaining wall are consistent with the requirements of Section 5.B.VIII, it is a permitted structure.

4. Construction Materials

The retaining wall will be constructed in accordance with the plans attached as Exhibit G and the specifications provided by Wyman & Simpson⁴ attached as Exhibit H. The steel sheet-piles that will be used will be “Z” style sheets that have an interlocking ball and socket. Exhibit H, p. 3-4. The steel sheet-piles will be faced with granite as shown on Exhibit H, p. 5-6.

Sheet-piling is the most effective method of slope and shoreline stabilization for this situation. It is less susceptible to scour than a precast block wall⁵ because the sheet-piles will be driven into the lakebed 8’-10’ or to ledge. With its interlocking sections, steel sheet-piling is stronger, more durable and will last longer than a precast block wall option. The granite facing will also give it a natural appearance, as well as adding strength. Driving sheet-piling will eliminate any need to excavate below the lake bottom to “toe in” the wall as is required for a concrete block retaining wall. Further, there will be no exposed soil for extended periods. Therefore, this method will create fewer impacts to the resource during construction than the riprap or precast retaining wall options.

The large, existing granite blocks supplemented with similar sized blocks will be used for the facing up to about one foot above the normal high-water mark. Exhibit H, p. 7-9. These large blocks will have steel dowel anchors drilled and epoxied into them that will be cast into a steel reinforced concrete filling. The concrete filling will have steel dowels bolted through the sheet-piling that will tie the whole thing together. These large blocks will be anchored to the sheet-piling and be sufficient to withstand the ice expansion that occurs every winter. The remainder

³ Although not specifically mentioned in the NRPA Permit, adding more riprap to the slope not a good option, because this would add more weight to already unstable soil conditions and it would make the slope even more unstable.

⁴ Wyman & Simpson, Inc. of Richmond, ME has built a reputation of building quality award winning projects for state agencies, municipalities and private clients in Maine, New Hampshire and Vermont for nearly 100 years. Slope and Shoreline Stabilization using all methods, specifically steel sheet-piling is one of its specialties. W & S and all of its supervisors are certified in erosion control by MDEP.

⁵ Precast concrete block retaining walls, similar to “Ready Rock” are susceptible to scour from wave action. Further, installing one requires excavating below the high water level to install the base, putting the resource at greater risk of impact due to the extended time of bare soil exposure.

of the retaining wall will be faced with real granite with thickness of two inches. Exhibit H, p. 5-6.

5. Construction Sequence and Maintenance

Much of the regrading and landscaping will be completed in the spring, summer and/or fall of 2020. This will include the landscaping on the South and West sides of the house, as well as, the portion within 20' of the house on the East side. If time permits, it will also include the installation of most of the granite blocks on the southerly property line.

Construction of the retaining wall will start in September or October. The first step will be to install timber construction mats from the Northeast corner of the house down to the top of the lakefront slope. Exhibit H, p. 10-12. The mats will ensure good access without making a mess by disturbing the existing vegetation. The installation of the steel sheet-piling, the large granite blocks up above the normal high-water mark and the concrete installation will occur during periods of low water, which typically happens between October and March. The water recedes from the normal high-water mark significantly during this period, which is crucial to assist in staying out of the water.

The remainder of the work will be completed during the spring, summer and/or fall of 2021, including the granite veneer installation, the granite stair tread installation, regrading and filling and the installation of a vegetated buffer zone. As previously stated, completing the entire project will require less than 100 cubic yards of filling and earthmoving as allowed under the Original Permit. Exhibit C.

Ongoing maintenance will include cleaning the riprap bowl shaped outlet of sediment and debris during regular yard cleanups in the spring and fall.

Sincerely,

Brent Chesley 4/8/20

Brent Chesley

bchesley@wymanandsimpson.com

(207) 737-4471

Town of China, Maine CEO Permit Application

Applicant Brent Chesley
Mailing Address P.O. Box 6241 China Village, ME 04926
Property Owner Brent Chesley
Property Location 83 Fire Rd 9 China, ME 04358
Email address bchesley@wymanandsimpson.com

Map 52 Lot 019
Deed - Book 7931 Page 142
Phone (applicant's) (207)968-2146
Owner (cell) (207)841-3137
(other #) _____

This property is in: Rural Shoreland Resource Protection Stream Protection

This application is for: (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Well | <input type="checkbox"/> Commercial Paving |
| <input type="checkbox"/> Road Construction | <input type="checkbox"/> Fuel Tank Removal or Reinstallation |
| <input type="checkbox"/> Sign | <input type="checkbox"/> Private Campsite |
| <input type="checkbox"/> Pier or Dock | <input type="checkbox"/> Mineral Exploration |
| <input type="checkbox"/> Clearing for approved construction | <input type="checkbox"/> Gravel Pit |
| <input type="checkbox"/> Filling or Earth-Moving (up to 100 yards) | <input checked="" type="checkbox"/> Other <u>Retaining Wall for Erosion Control</u> |

Project Description: (include dimensions and descriptions)

Construction of a Granite Faced Steel Sheetpile Retaining Wall
(See attached letter and supporting information)

Standard Conditions of Permit: Visit www.china.govoffice.com for China's Land Development Code.

1. The property owner/applicant/contractor shall comply with the China Land Development Code.
2. All dimension requirements including setbacks from property lines, lot coverage and lot area shall be maintained.
3. Erosion control measures shall be maintained as indicated in permit.
4. The applicant is responsible for contacting the CEO for all required inspections giving a minimum 24 hours notice to the CEO. Messages left on the CEO's phone do not constitute notice.
5. The applicant is responsible for following submitted plans.
6. Permission for the Town to enter onto the property during reasonable hours to conduct inspections is hereby granted.
7. The applicant hereby certifies that all information contained in this application is true and correct.
8. The applicant must comply with all special conditions as noted by the CEO on the reverse side of this document.

YOU MUST SKETCH YOUR PLANS FOR YOUR APPLICATION TO BE REVIEWED.

DATE: 4/8/20

SIGNATURE: Brent Chesley

The following is a list of other information that you **must** furnish. If you don't know the setbacks and/or dimensions, you **must go out and measure** before completing this application!

| | | | |
|---------------|-------------------------|----------------|------------|
| Road setback | <u>N/A</u> | road frontage | <u>N/A</u> |
| Side setbacks | <u>N/A</u> & <u>N/A</u> | water frontage | <u>50'</u> |
| Rear setback | <u>N/A</u> | water setback | <u>N/A</u> |

Please sketch your lot on a separate piece of paper or below with all dimensions, showing any buildings as they appear on the lot, along with proposed additions, decks, accessory buildings, or garages. In addition to the above list, please show where any of the following are located on the property: well & septic, any wetlands, rights-of-way, driveways, north arrow, and anything else which might assist the code officer in determining where your new building/addition will be located on your property. **Your application will not be reviewed until a sketch is received.**

CEO USE ONLY

CEO PERMIT # _____

| |
|-----------------|
| Receipt # _____ |
| Date _____ |

Special conditions of permit: _____

Erosion control required: _____ **Type:** _____ **Inspection of erosion control:** _____

This permit expires if: Substantial construction is not started by _____

The project is not completed by _____

TOTAL FEE DUE: \$ _____

Notes: _____

Signed: _____ **Date:** _____

CEO, Plumbing and Building Inspector

Brent A or Cathy B Chesley
(207) 968-2146
83 9th Fire Road
China Village, ME 04926

5380
52-7442/112

PAY to the order of TOWN OF CHINA

4/8/20

Date

\$ 30.00

 **Kennebec Savings Bank**

Member FDIC
Dollars Member FDIC
Deposits by Kennebec Savings Bank
www.kennebecsavingsbank.com

For _____
⑆211274421⑆

100162750⑈ 5380

Brent A Chesley

MP

Town of China, Maine CEO Permit Application

Applicant Brent Chesley
Mailing Address P.O. Box 6241 China Village, ME 04926
Property Owner Brent Chesley
Property Location 83 Fire Rd 9 China, ME 04358
Email address bchesley@wymanandsimpson.com

Map 52 Lot 019
Deed - Book 7931 Page 142
Phone (applicant's) (207)968-2146
Owner (cell) (207-841-3137
(other #) _____

This property is in: Rural Shoreland Resource Protection Stream Protection

This application is for: (check all that apply)

- | | |
|---|--|
| <input type="checkbox"/> Well | <input type="checkbox"/> Commercial Paving |
| <input type="checkbox"/> Road Construction | <input type="checkbox"/> Fuel Tank Removal or Reinstallation |
| <input type="checkbox"/> Sign | <input type="checkbox"/> Private Campsite |
| <input type="checkbox"/> Pier or Dock | <input type="checkbox"/> Mineral Exploration |
| <input type="checkbox"/> Clearing for approved construction | <input type="checkbox"/> Gravel Pit |
| <input checked="" type="checkbox"/> Filling or Earth-Moving (up to 100 yards) | <input type="checkbox"/> Other _____ |

Project Description: (include dimensions and descriptions)

Regrading & Landscaping

(See attached Site Plan & Details)

Standard Conditions of Permit: Visit www.china.govoffice.com for China's Land Development Code.

1. The property owner/applicant/contractor shall comply with the China Land Development Code.
2. All dimension requirements including setbacks from property lines, lot coverage and lot area shall be maintained.
3. Erosion control measures shall be maintained as indicated in permit.
4. The applicant is responsible for contacting the CEO for all required inspections giving a minimum 24 hours notice to the CEO. Messages left on the CEO's phone do not constitute notice.
5. The applicant is responsible for following submitted plans.
6. Permission for the Town to enter onto the property during reasonable hours to conduct inspections is hereby granted.
7. The applicant hereby certifies that all information contained in this application is true and correct.
8. The applicant must comply with all special conditions as noted by the CEO on the reverse side of this document.

YOU MUST SKETCH YOUR PLANS FOR YOUR APPLICATION TO BE REVIEWED.

DATE: 9/12/19

SIGNATURE: Brent Chesley

The following is a list of other information that you must furnish. If you don't know the setbacks and/or dimensions, you must go out and measure before completing this application!

| | | | |
|---------------|--------------------|----------------|------------|
| Road setback | <u>N/A</u> | road frontage | <u>N/A</u> |
| Side setbacks | <u>N/A</u> & _____ | water frontage | <u>50'</u> |
| Rear setback | <u>N/A</u> | water setback | <u>N/A</u> |

Please sketch your lot on a separate piece of paper or below with all dimensions, showing any buildings as they appear on the lot, along with proposed additions, decks, accessory buildings, or garages. In addition to the above list, please show where any of the following are located on the property: well & septic, any wetlands, rights-of-way, driveways, north arrow, and anything else which might assist the code officer in determining where your new building/addition will be located on your property. Your application will not be reviewed until a sketch is received.

CEO USE ONLY

CEO PERMIT # 2019-103

| | |
|-----------|----------------|
| Receipt # | |
| Date | <u>9/16/19</u> |

Special conditions of permit: See notes below
 Erosion control required: Y Type: silt fence Inspection of erosion control: _____

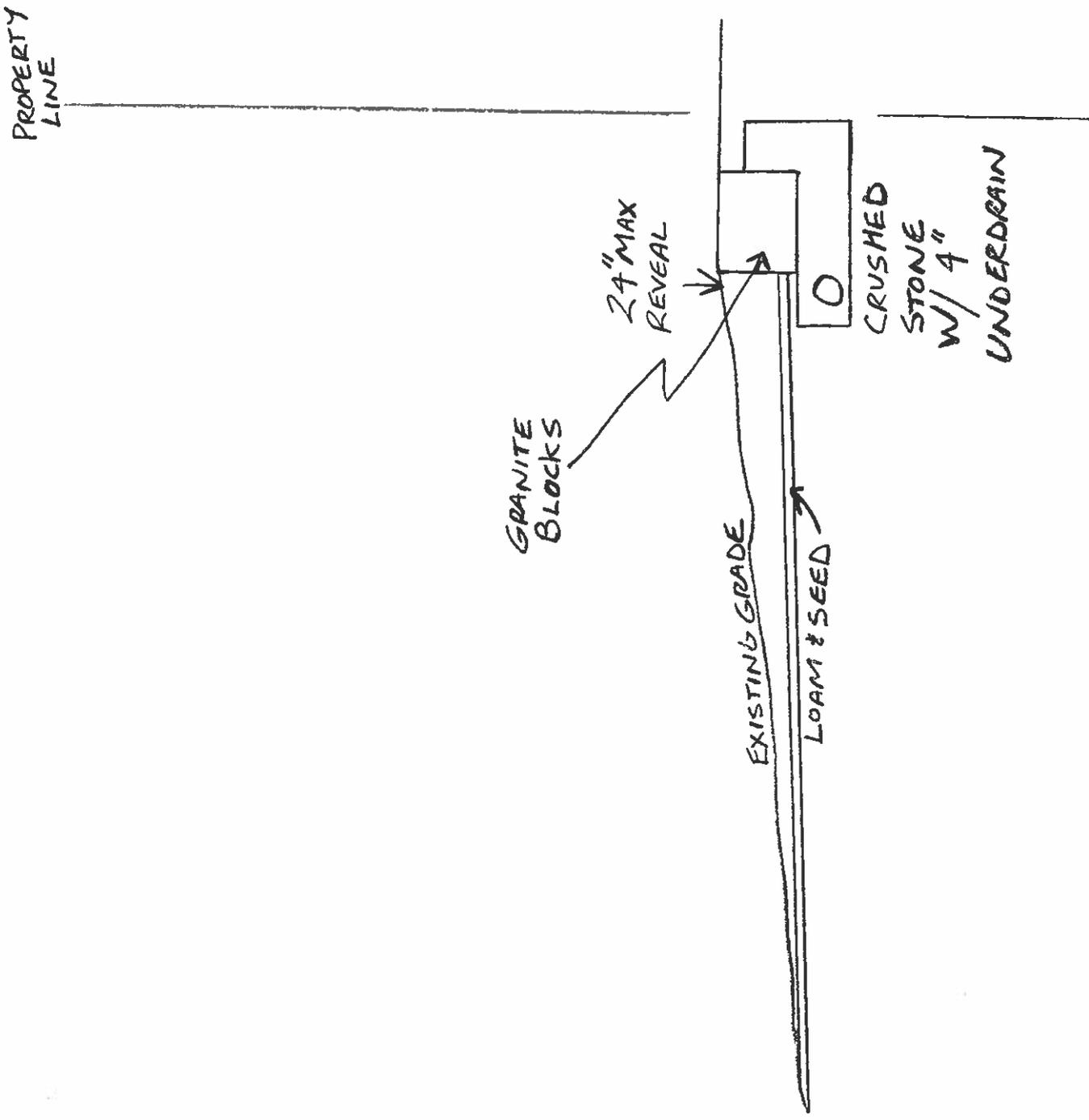
This permit expires if: Substantial construction is not started by 12 months from permit date
 The project is not completed by 30 months from permit date

TOTAL FEE DUE: \$ 30.00

Notes: (1) This Permit does not include sheet pile wall which is being reviewed by DEP. (2) No structure shall be built on granite steps.

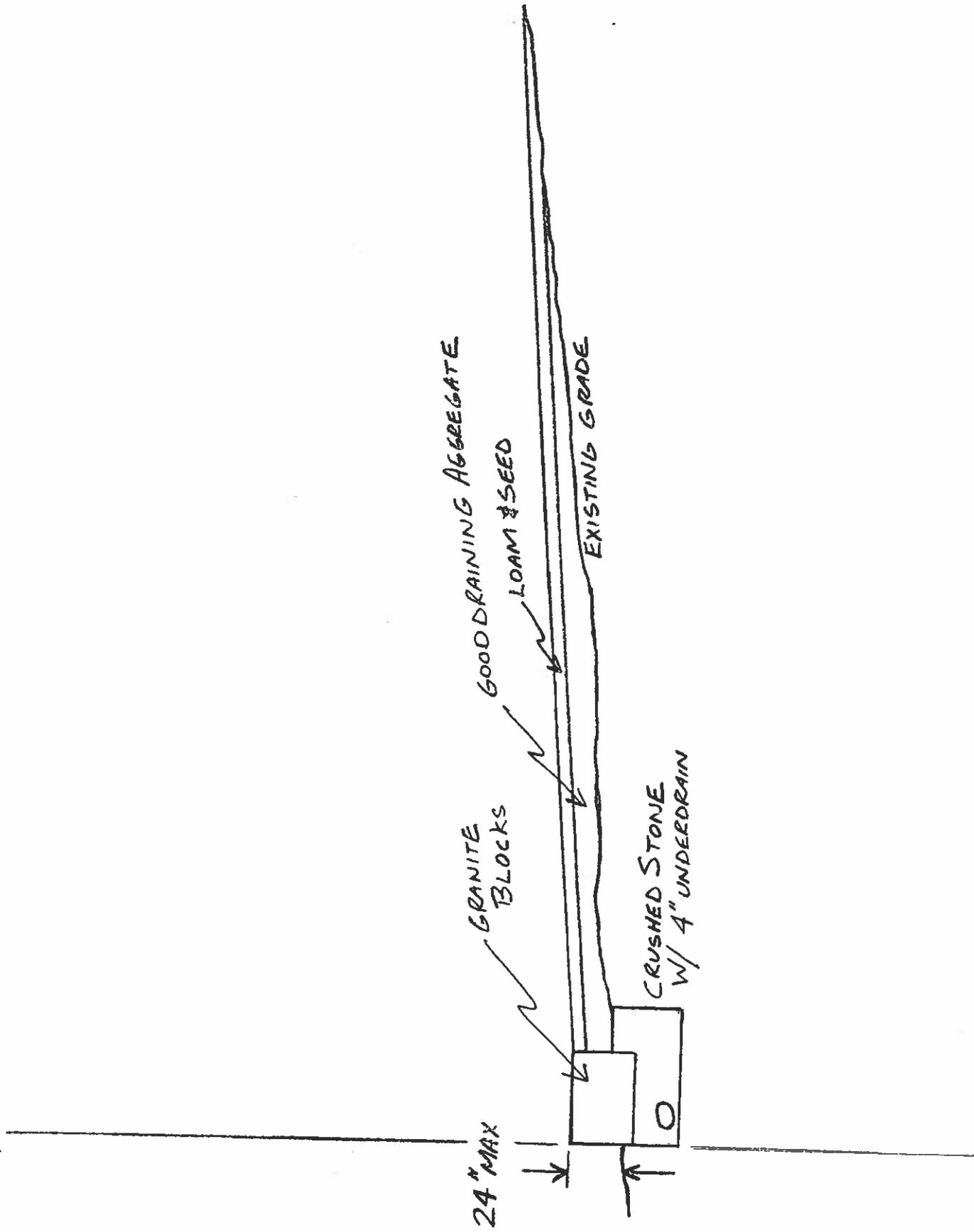
Signed: Wm Butts Date: 9/16/19
 .O, Plumbing and Building Inspector

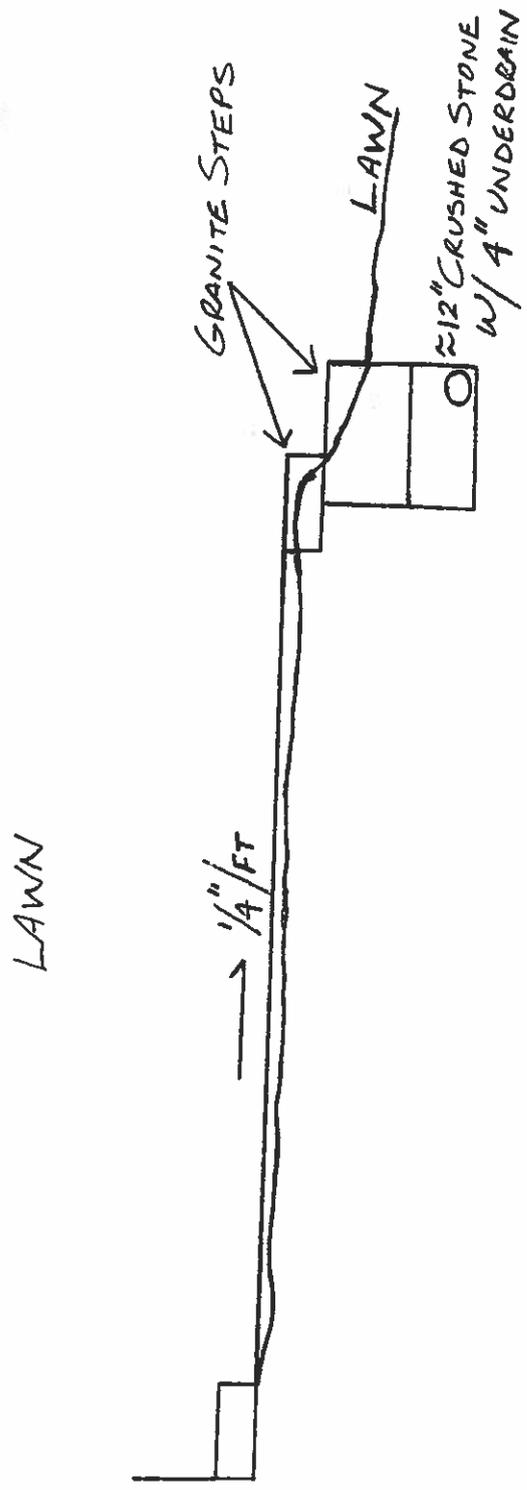
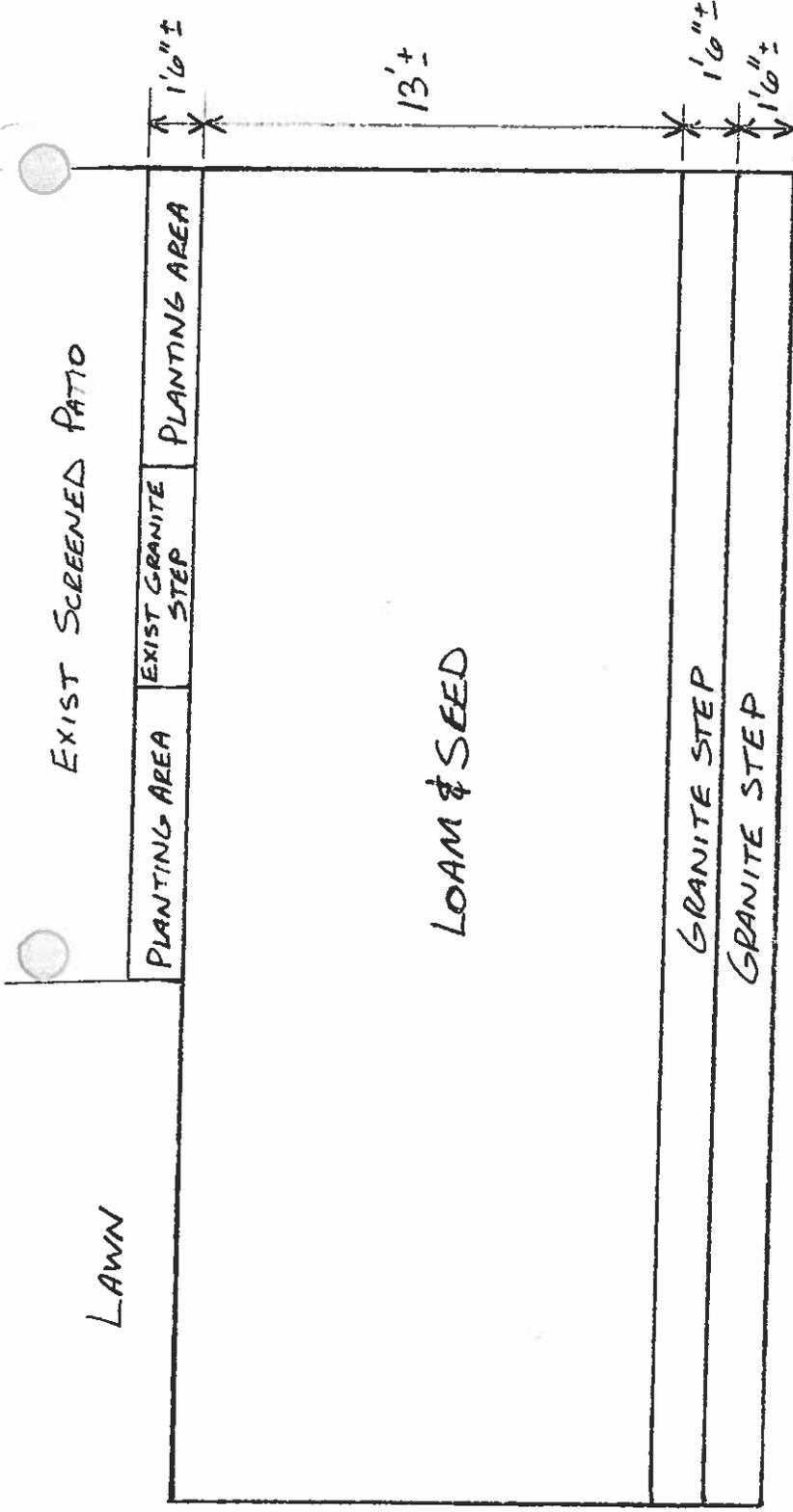
GRANITE BLOCKS ALONG
NORTHERLY PROPERTY LINE



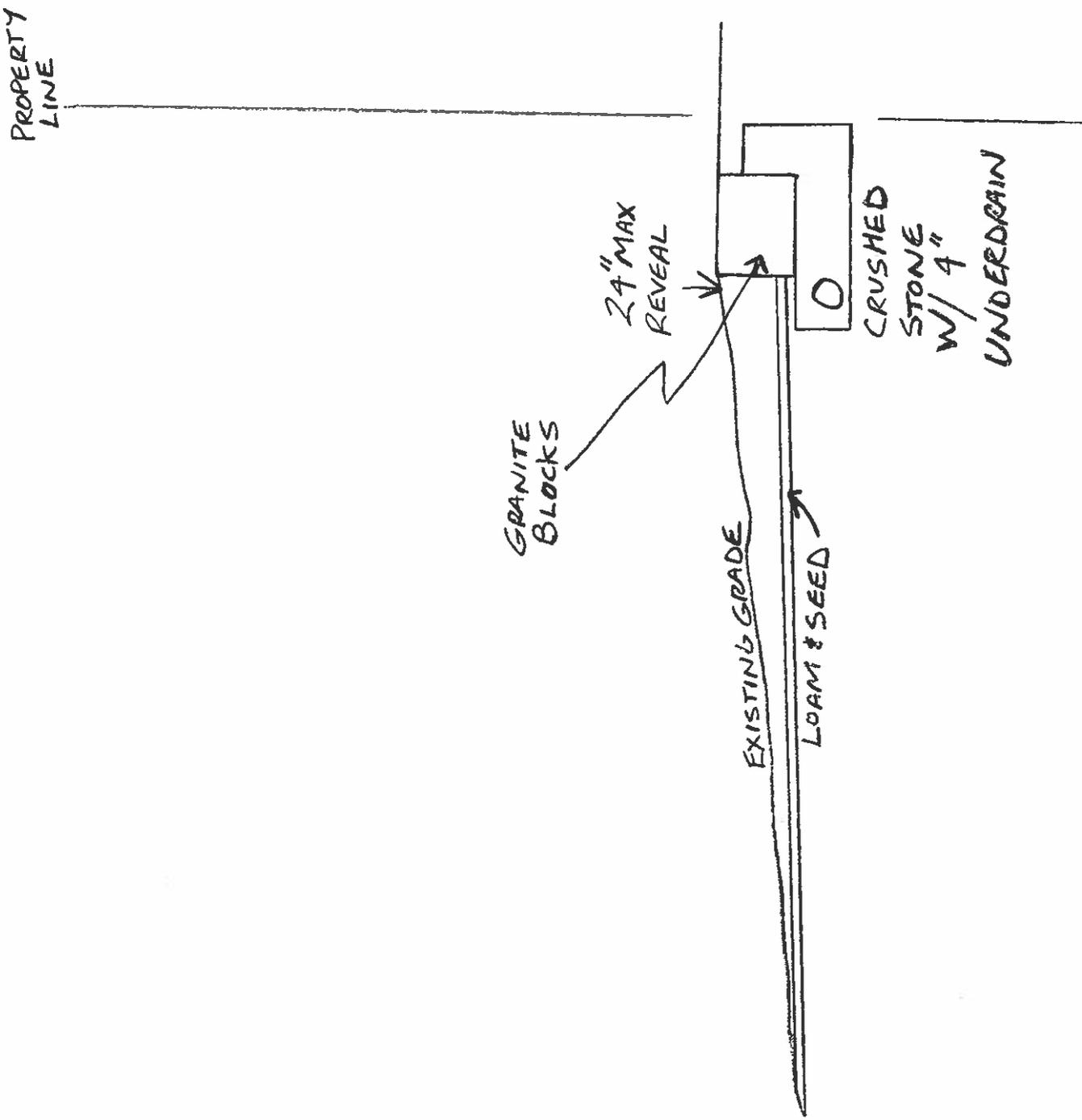
GRANITE BLOCKS ALONG
SOUTHERLY PROPERTY LINE

PROPERTY
LINE





GRANITE BLOCKS ALONG
NORTHERLY PROPERTY LINE





STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

IN THE MATTER OF

BRENT CHESLEY
China, Kennebec County
RETAINING WALL
L-28372-2A-A-N
(partial after-the-fact approval)

) NATURAL RESOURCES PROTECTION ACT
) ADJACENCY TO A GREAT POND
) WATER QUALITY CERTIFICATION
)
) FINDINGS OF FACT AND ORDER

Pursuant to the provisions of 38 M.R.S. §§ 480-A-480-JJ, Section 401 of the Federal Water Pollution Control Act (33 U.S.C. § 1341), and Chapters 310 and 315 of Department rules, the Department of Environmental Protection has considered the application of BRENT CHESLEY with the supportive data, agency review comments, public comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. PROJECT DESCRIPTION:

A. Project History: The Department accepted a Permit by Rule Notification Form (PBR #22351) pursuant to Chapter 305 Permit by Rule Standards Section 8 (06-096 Ch. 305 § 8) on April 26, 1999, to install riprap along the shoreline. At or around the time the shoreline stabilization was installed, a six-foot wide granite stairway leading to the resource was installed without prior approval. Near the stairs, portions of the riprap are secured with a single row of granite blocks at the toe of slope. High water is located at the toe of the riprap and along the row of granite blocks. The applicant is currently in the process of constructing an addition off the back of the residence, which is located greater than 75 feet from China Lake. During the construction phase, soil was disturbed within 75 feet of the resource. The applicant has installed temporary erosion and sedimentation measures and seeded the disturbed area with winter rye. The project site is located on Fire Road 9 in the Town of China.

B. Summary: The applicant is seeking approval to install a granite faced, sheet pile retaining wall along the shoreline, install a patio, relocate an existing outfall pipe, and regrade the existing lawn area behind the retaining wall. The applicant is also seeking approval to place a line of granite blocks along the southern edge of its property. The proposed retaining wall will be 34 feet long, seven feet tall, and will contain a built-in six-foot wide staircase leading to an existing temporary dock. The north side of the retaining wall will turn 90 degrees and extend 10 feet into the upland. The proposed retaining wall will be located adjacent to the great pond, essentially maintaining the points where the existing granite block touches the high water mark. The applicant proposes to install a 35-foot wide by 13-foot long patio, with two granite steps running across the full length of the patio, adjacent to the house, approximately 65 feet from the great pond. The applicant proposes to replace an existing outfall pipe that is currently located along the length of the north side of the property and relocate the outfall pipe such that it runs from the top north side of the property to the south side where it will

discharge into a plunge pool and then into the great pond. The applicant also proposes to regrade the property between the patio and the retaining wall. The proposed project can be seen on a set of plans, the first of which is entitled, "China Lake Retaining Wall," prepared by A.E. Hodsdon Engineers with a last revision date of October 8, 2019.

C. **Current Use of the Site:** The site of the proposed project is a 0.59-acre parcel that contains a residence located in the upland area of the property. The site also contains existing riprap shoreline secured by one row of granite blocks at the base of the slope and a built-in granite staircase leading to the resource. The parcel is identified as Lot #19 on Map #52 of the Town of China's tax maps. The parcel is further identified in the Kennebec County Registry of Deeds on Page #142 in Book #7931.

D. **Interested Persons:** While the application was being reviewed, the Department received comments from two interested persons, one who owns property abutting the project site, and the other, from the local lake association. The Department received a request for a public hearing during the 20-day period specified in the Department's Chapter 2 Rules governing the processing of an application.

One of the interested persons submitted comments in the form of a letter addressed to Department staff, dated August 12, 2019. The letter expressed concerns regarding appropriate landscaping and buffers within the shoreland zone, the effect of runoff from the proposed project site onto their property, which is located downgradient of the project site, and the Town of China property setbacks, which are 10 feet. The interested person also expressed concern regarding adverse impacts to scenic, aesthetic, recreational, and navigational uses of the resource in the vicinity of the project site. Although the letter referred to general concerns, it did not contain credible conflicting technical information regarding a licensing criterion; therefore, the Department responded in a letter dated August 17, 2019, that a public hearing would not be held.

The applicant responded to the abutters' comments in a letter dated August 22, 2019. In the letter, the applicant stated that it is his opinion that vegetative buffers would not permanently reduce erosion at this specific site. The applicant further stated that the abutter would not receive any adverse runoff from the proposed project. Subsequently, the abutter hired an attorney to represent them. The abutter and their attorney requested that all submissions and correspondence be sent to them.

The other interested person submitted comments in the form of a letter addressed to Department staff, dated August 13, 2019. The letter expressed concern regarding the adverse impacts to scenic, aesthetic, recreational, and navigational uses of the resource in the vicinity of the project site. The interested person also expressed concern regarding the placement of the retaining wall within the great pond and the precedent that this project could set for future development. These concerns are addressed in Finding 5.

Department staff visited the project site on September 3, 2019, and met with the applicant to discuss the proposed project. Following the site visit, in response to the submitted comments, and discussion with the Department, the applicant revised his plan and moved

the retaining wall landward so that it is adjacent to the great pond. All the submitted comments were thoroughly reviewed and given consideration to the analysis of whether the proposed project meets the statutory and regulatory review criteria. The Department accepted all comments, which were submitted to the Department's record.

2. EXISTING SCENIC, AESTHETIC, RECREATIONAL OR NAVIGATIONAL USES:

The Natural Resources Protection Act (NRPA), in 38 M.R.S. §480-D(1), requires the applicant to demonstrate that the proposed project will not unreasonably interfere with existing scenic, aesthetic, recreational and navigational uses.

In accordance with Chapter 315, *Assessing and Mitigating Impacts to Scenic and Aesthetic Uses* (06-096 C.M.R. ch. 315, effective June 29, 2003), the applicant submitted a copy of the Department's Visual Evaluation Field Survey Checklist as Appendix A to the application along with a description of the property and the proposed project. The applicant also submitted several photographs of the proposed project site and surroundings including an aerial photograph of the project site. Department staff visited the project site on September 3, 2019.

Both interested persons submitted comments regarding the visibility of the proposed project from the great pond, indicating that the view for the user on the great pond would be negatively affected as a result of this project. Additionally, the submitted comments regarded concern for the cumulative effect of multiple retaining walls located on the great pond, indicating that the view for the user of the great pond, would be negatively affected as a result the proposed project.

The proposed project is located in China Lake, which is a scenic resource visited by the general public, in part, for the use, observation, enjoyment and appreciation of its natural and cultural visual qualities. The project is located directly adjacent to the lake. Many properties in the area have shorelines that are currently stabilized with riprap and there are multiple properties that have shorelines stabilized with vertical retaining walls. The applicant submitted photo documentation indicating that there are 14 properties along the China Lake shoreline that are currently stabilized with retaining wall structures.

Much of the properties around China Lake are residentially developed, including in the area of Fire Road 9 which runs parallel to the great pond. When a person is recreating on the water and looking towards the project area, they see residential development consisting of houses, lawns, temporary docks, boats and stabilized shorelines. The closest two retaining walls are located approximately 2,500 linear feet from the project site. Because there are existing retaining walls along the shoreline of China Lake and in the vicinity of the project area, there is little concern that this project will set negative precedent.

To reduce visibility of the project from the scenic resource, the applicant proposes to install a 10-foot wide vegetated buffer behind the retaining wall. The buffer will consist of a variety of plantings such as creeping juniper, dwarf forthergilla, and Virginia

creeper. The applicant must monitor the plantings and the plantings must be replaced or maintained as necessary to achieve 85% survival after one full growing season.

Additionally, the applicant proposes to face the steel sheet pile wall with granite blocks in an effort to blend with other retaining walls around the lake and to reduce the visibility of the retaining wall from the scenic resource.

The Department staff utilized the Department's Visual Impact Assessment Matrix in its evaluation of the proposed project and the Matrix showed an acceptable potential visual impact rating for the proposed project. Based on the information submitted in the application, the visual impact rating and the site visit, the Department determined that the location and scale of the proposed activity is compatible with the existing visual quality and landscape characteristics found within the viewshed of the scenic resource in the project area.

The Department determined that based on the nature of the proposed project and its location, there are no existing recreational or navigational uses of the resource that would be unreasonably impacted.

During its review, the Department considered the concerns of the interested persons, the plans and information in the project file, the site visit and its assessment of the scenic resource. As a result, the Department finds that the proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational or navigational uses of the great pond, provided that the applicant monitors and maintains the plantings as described above.

3. SOIL EROSION:

The NRPA, in 38 M.R.S. §480-D(2), requires the applicant to demonstrate that the proposed project will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

The interested persons are concerned that construction on the project site will cause erosion of soil and sedimentation into the resource.

The applicant submitted a construction and erosion control plan that outlines specific construction guidelines for pre- and post-construction, the stockpiling of materials, and equipment access. The proposed project will be constructed from the upland with equipment parked and stockpiles located north of the house, greater than 150 feet from the resource. The applicant owns Wyman & Simpson and intends to use his own company to construct the project. He is a certified contractor. The applicant proposes to install and maintain all necessary erosion control devices prior to the start of construction. Specifically, the applicant proposes to install silt fence at the bottom of the existing riprap. If this erosion and sedimentation device turns out to be insufficient, a floating silt boom will be utilized. All earthwork shall occur during periods of no or minimal rain.

The proposed retaining wall will be installed during periods of low water. The applicant proposes to remove the existing riprap and granite blocks from the resource, including the granite stairs. The sheet pile with welded steel tie backs will be driven into the substrate and then backfilled with crushed stone and glacial till. The retaining wall will contain weep holes to allow the natural flow of surface water into the resource.

The existing outfall pipe will be removed and re-installed with a different outfall location. The applicant proposes to regrade the shorefront. A trench will be dug, and a six-inch pipe will be installed across the property. The pipe will begin at the proposed patio and will outfall into a plunge pool on the bottom southern edge of the property. The outfall pipe will discharge water from the roof of the house and a portion of the driveway.

Along the southern edge of the property, a line of granite blocks approximately 35 feet long and 23-inches high will be placed offset and adjacent to the property line.

The patio will be constructed with two 35-foot long granite blocks underlain with 12 inches of crushed stone. The patio area will be loamed, seeded, and will revegetate as grass.

Upon completion of the project, any excess materials will be removed from the site and properly disposed of. The contractor will perform all erosion controls according to the *Maine Erosion and Sediment Control Practices Field Guide for Contractors*. Details of the construction and erosion control plan are outlined in Attachments 7 and 8 in the application.

After consideration of the interested persons concerns, the project plans and the proposed construction methods, the Department finds that the activity will not cause unreasonable erosion of soil or sediment nor unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.

4. HABITAT CONSIDERATIONS:

The NRPA, in 38 M.R.S. §480-D(3), requires the applicant to demonstrate that the proposed project will not unreasonably harm significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life.

The project site is a variably sloped lawn leading to a 1.5:1 sloped shoreline that contains riprap toed in with one row of granite blocks. The top of the slope contains one birch tree with exposed roots. There is a small amount of erosion occurring in the location of the existing outfall pipe and around the base of the birch tree. The riprap is overgrown with creeping juniper, goldenrod, cow vetch, and Cyprus spurge.

According to the Department's Geographic Information System (GIS) database there are no mapped Essential or Significant Wildlife Habitats located at the site.

The Department finds that the activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine or marine fisheries or other aquatic life.

5. WATER QUALITY CONSIDERATIONS:

The interested persons commented that the proposed project will negatively impact water quality standards by excavating material and therefore exposing sediment, which will runoff into China Lake. The interested persons additionally commented that the proposed project will negatively impact water quality standards such that erosion of sediment into the resource is likely in the spring, after snow melt, extreme rain events, or other severe weather events.

The proposed retaining wall will not be located within the great pond and therefore will not have any direct impact on the water quality on China Lake. Additionally, the applicant has agreed to a 10-foot vegetative buffer consisting of native shrubs and vines, which will further minimize soil transport into the resource. As discussed in Finding 3, the applicant will utilize erosion and sedimentation controls throughout the construction process and until the site has been permanently stabilized to minimize impacts to water quality from siltation. The applicant will utilize all erosion and sedimentation controls per the *Maine Erosion and Sediment Control Practices Field Guide for Contractors*.

The Department considered the concerns of interested persons during its review. Based on the project plans, the proposed construction methods and the Department's review, the Department does not anticipate that the proposed project will violate any state water quality law, including those governing the classification of the State's waters.

6. WETLANDS AND WATERBODIES PROTECTION RULES:

The applicant proposes to directly alter upland adjacent to the great pond to install the sheet pile retaining wall, patio, and outfall pipe and to regrade the lawn. All activities are located within 75 feet of the great pond. There will be no direct impact to the great pond.

The *Wetlands and Waterbodies Protection Rules*, 06-096 C.M.R. ch. 310 (last amended November 11, 2018), interpret and elaborate on the Natural Resources Protection Act (NRPA) criteria for obtaining a permit. The rules guide the Department in its determination of whether a project's impacts would be unreasonable. A proposed project would generally be found to be unreasonable if it would cause a loss in wetland area, functions and values and there is a practicable alternative to the project that would be less damaging to the environment. Each application for a NRPA permit that involves a great pond alteration must provide an analysis of alternatives in order to demonstrate that a practicable alternative does not exist.

A. **Avoidance.** An applicant must submit an analysis of whether there is a practicable alternative to the project that would be less damaging to the environment and this analysis is considered by the Department in its assessment of the reasonableness of any impacts. As originally proposed, the retaining wall would have been located in China Lake. The applicant submitted an alternatives analysis associated with this initial proposal that was completed by A.E. Hodsdon Consulting Engineers and dated July 19, 2019. The purpose of the proposed project is to replace the existing riprap retaining wall that is currently failing and provide an effective stabilization measure that will reduce the amount of runoff from the property that ends up in the resource. The applicant considered several alternatives to the proposed project, including the no-action approach, but this was found to not meet project goals, as the applicant has determined that the existing shoreline stabilization will continue to discharge sediment into the resource, if left as is. The applicant considered utilizing alternative materials to stabilize the shoreline, such as the use of riprap. The applicant stated this alternative would not meet project goals, as the applicant believes the existing riprap has failed and it is his opinion that re-installing riprap in this location will not reduce the amount of runoff on the site because of the soil type present on site. The applicant stated that in this location, riprap would not be as effective as a sheet pile retaining wall. In the course of reviewing the proposal another alternative was identified and ultimately adopted by the applicant. This alternative, the proposed project, involved locating the retaining wall outside of the lake. This alternative avoids alteration of the great pond. In summary, the applicant considered multiple alternatives, and selected an alternative that meets the project purpose and avoids impacts to the resource.

B. **Minimal Alteration.** In support of an application and to address the analysis of the reasonableness of any impacts of a proposed project, an applicant must demonstrate that the amount of great pond to be altered will be kept to the minimum amount necessary for meeting the overall purpose of the project. Originally, the applicant was seeking approval to place the retaining wall within the great pond. Through conversation with Department staff, the applicant revised the project multiple times, which eventually resulted in the proposed retaining wall being constructed adjacent to the great pond. The applicant stated that as currently proposed, the proposed project will not directly impact the great pond. The applicant stated that he has minimized impacts to the great pond to the greatest extent practicable.

C. **Compensation.** In accordance with Chapter 310, § 5(C)(6)(c), compensation may be required to achieve the goal of no net loss of great pond functions and values. This project will not result in fill in the resource, which is the threshold over which compensation is generally required. Further, the proposed project will not have an adverse impact on wildlife habitat as determined by the Department. For these reasons, the Department determined that compensation is not required.

The Department finds that the applicant has avoided and minimized great pond impacts to the greatest extent practicable, and that the proposed project represents the least environmentally damaging alternative that meets the overall purpose of the project.

7. OTHER CONSIDERATIONS:

The Department finds, based on the design, proposed construction methods, and location, the proposed project will not inhibit the natural transfer of soil from the terrestrial to the marine environment, will not interfere with the natural flow of any surface or subsurface waters, and will not cause or increase flooding. The proposed project is not located in a coastal sand dune system, is not a crossing of an outstanding river segment, and does not involve dredge spoils disposal or the transport of dredge spoils by water.

BASED on the above findings of fact, and subject to the conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S. §§ 480-A-480-JJ and Section 401 of the Federal Water Pollution Control Act:

- A. The proposed activity will not unreasonably interfere with existing scenic, aesthetic, recreational, or navigational uses, provided that the applicant monitors and maintains vegetation as described in Finding 2.
- B. The proposed activity will not cause unreasonable erosion of soil or sediment.
- C. The proposed activity will not unreasonably inhibit the natural transfer of soil from the terrestrial to the marine or freshwater environment.
- D. The proposed activity will not unreasonably harm any significant wildlife habitat, freshwater wetland plant habitat, threatened or endangered plant habitat, aquatic or adjacent upland habitat, travel corridor, freshwater, estuarine, or marine fisheries or other aquatic life.
- E. The proposed activity will not unreasonably interfere with the natural flow of any surface or subsurface waters.
- F. The proposed activity will not violate any state water quality law including those governing the classifications of the State's waters.
- G. The proposed activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties.
- H. The proposed activity is not on or adjacent to a sand dune.
- I. The proposed activity is not on an outstanding river segment as noted in 38 M.R.S. § 480-P.

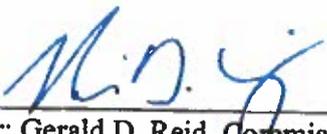
THEREFORE, the Department APPROVES the above noted application of BRENT CHESLEY to install a retaining wall adjacent to the great pond, as described in Finding 1, SUBJECT TO THE ATTACHED CONDITIONS, and all applicable standards and regulations:

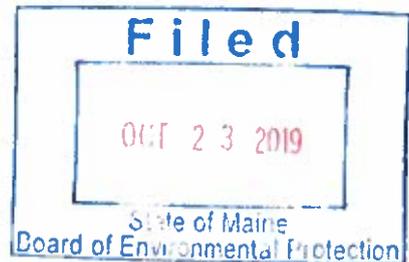
1. Standard Conditions of Approval, a copy attached.
2. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soil on the site during the construction of the project covered by this approval.
3. Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.
4. The applicant shall monitor all plantings and the plantings must be replaced or maintained as necessary to achieve 85% survival after one full growing season.

THIS APPROVAL DOES NOT CONSTITUTE OR SUBSTITUTE FOR ANY OTHER REQUIRED STATE, FEDERAL OR LOCAL APPROVALS NOR DOES IT VERIFY COMPLIANCE WITH ANY APPLICABLE SHORELAND ZONING ORDINANCES.

DONE AND DATED IN AUGUSTA, MAINE, THIS 23rd DAY OF October, 2019.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: 
For: Gerald D. Reid, Commissioner



PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES.

KG/L28372AN/ATS#84818



Natural Resources Protection Act (NRPA) Standard Conditions

THE FOLLOWING STANDARD CONDITIONS SHALL APPLY TO ALL PERMITS GRANTED UNDER THE NATURAL RESOURCES PROTECTION ACT, 38 M.R.S. § 480-A ET SEQ., UNLESS OTHERWISE SPECIFICALLY STATED IN THE PERMIT.

- A. Approval of Variations From Plans. The granting of this permit is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from these plans, proposals, and supporting documents is subject to review and approval prior to implementation.
- B. Compliance With All Applicable Laws. The applicant shall secure and comply with all applicable federal, state, and local licenses, permits, authorizations, conditions, agreements, and orders prior to or during construction and operation, as appropriate.
- C. Erosion Control. The applicant shall take all necessary measures to ensure that his activities or those of his agents do not result in measurable erosion of soils on the site during the construction and operation of the project covered by this Approval.
- D. Compliance With Conditions. Should the project be found, at any time, not to be in compliance with any of the Conditions of this Approval, or should the applicant construct or operate this development in any way other the specified in the Application or Supporting Documents, as modified by the Conditions of this Approval, then the terms of this Approval shall be considered to have been violated.
- E. Time frame for approvals. If construction or operation of the activity is not begun within four years, this permit shall lapse and the applicant shall reapply to the Board for a new permit. The applicant may not begin construction or operation of the activity until a new permit is granted. Reapplications for permits may include information submitted in the initial application by reference. This approval, if construction is begun within the four-year time frame, is valid for seven years. If construction is not completed within the seven-year time frame, the applicant must reapply for, and receive, approval prior to continuing construction.
- F. No Construction Equipment Below High Water. No construction equipment used in the undertaking of an approved activity is allowed below the mean high water line unless otherwise specified by this permit.
- G. Permit Included In Contract Bids. A copy of this permit must be included in or attached to all contract bid specifications for the approved activity.
- H. Permit Shown To Contractor. Work done by a contractor pursuant to this permit shall not begin before the contractor has been shown by the applicant a copy of this permit.

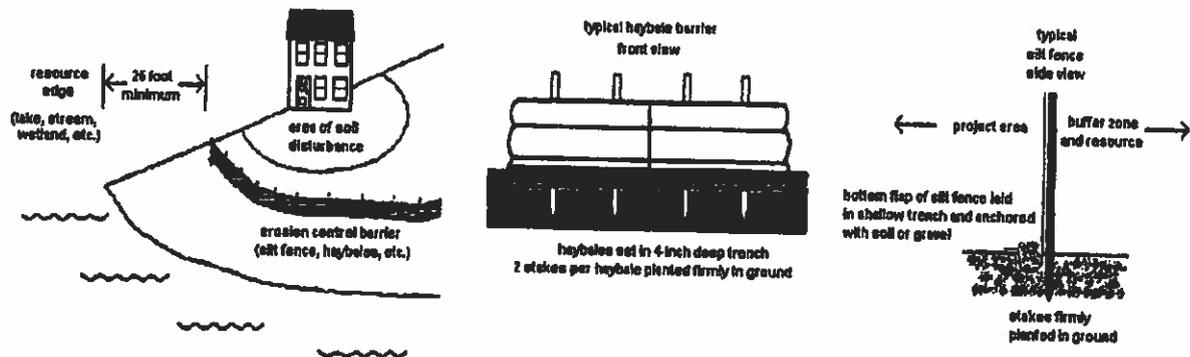


STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION, AUGUSTA, MAINE 04333

Erosion Control for Homeowners

Before Construction

1. If you have hired a contractor, make sure you discuss your permit with them. Talk about what measures they plan to take to control erosion. Everybody involved should understand what the resource is, and where it is located. Most people can identify the edge of a lake or river. However, the edges of wetlands are often not so obvious. Your contractor may be the person actually pushing dirt around, but you are both responsible for complying with the permit.
2. Call around to find where erosion control materials are available. Chances are your contractor has these materials already on hand. You probably will need silt fence, hay bales, wooden stakes, grass seed (or conservation mix), and perhaps filter fabric. Places to check for these items include farm & feed supply stores, garden & lawn suppliers, and landscaping companies. It is not always easy to find hay or straw during late winter and early spring. It also may be more expensive during those times of year. Plan ahead -- buy a supply early and keep it under a tarp.
3. Before any soil is disturbed, make sure an erosion control barrier has been installed. The barrier can be either a silt fence, a row of staked hay bales, or both. Use the drawings below as a guide for correct installation and placement. The barrier should be placed as close as possible to the soil-disturbance activity.
4. If a contractor is installing the erosion control barrier, double check it as a precaution. Erosion control barriers should be installed "on the contour", meaning at the same level or elevation across the land slope, whenever possible. This keeps stormwater from flowing to the lowest point along the barrier where it can build up and overflow or destroy the barrier.



During Construction

1. Use lots of hay or straw mulch on disturbed soil. The idea behind mulch is to prevent rain from striking the soil directly. It is the force of raindrops hitting the bare ground that makes the soil begin to move downslope with the runoff water, and cause erosion. More than 90% of erosion is prevented by keeping the soil covered.
2. Inspect your erosion control barriers frequently. This is especially important after a rainfall. If there is muddy water leaving the project site, then your erosion controls are not working as intended. You or your contractor then need to figure out what can be done to prevent more soil from getting past the barrier.

3. Keep your erosion control barrier up and maintained until you get a good and healthy growth of grass and the area is permanently stabilized.

After Construction

1. After your project is finished, seed the area. Note that all ground covers are not equal. For example, a mix of creeping red fescue and Kentucky bluegrass is a good choice for lawns and other high-maintenance areas. But this same seed mix is a poor selection for stabilizing a road shoulder or a cut bank that you don't intend to mow. Your contractor may have experience with different seed mixes, or you might contact a seed supplier for advice.
2. Do not spread grass seed after September 15. There is the likelihood that germinating seedlings could be killed by a frost before they have a chance to become established. Instead, mulch the area with a thick layer of hay or straw. In the spring, rake off the mulch and then seed the area. Don't forget to mulch again to hold in moisture and prevent the seed from washing away or being eaten by birds or other animals.
3. Keep your erosion control barrier up and maintained until you get a good and healthy growth of grass and the area is permanently stabilized.

Why Control Erosion?

To Protect Water Quality

When soil erodes into protected resources such as streams, rivers, wetlands, and lakes, it has many bad effects. Eroding soil particles carry phosphorus to the water. An excess of phosphorus can lead to explosions of algae growth in lakes and ponds called blooms. The water will look green and can have green slime in it. If you are near a lake or pond, this is not pleasant for swimming, and when the soil settles out on the bottom, it smothers fish eggs and small animals eaten by fish. There many other effects as well, which are all bad.

To Protect the Soil

It has taken thousands of years for our soil to develop. Its usefulness is evident all around us, from sustaining forests and growing our garden vegetables, to even treating our septic wastewater! We cannot afford to waste this valuable resource.

To Save Money (\$\$)

Replacing topsoil or gravel washed off your property can be expensive. You end up paying twice because State and local governments wind up spending your tax dollars to dig out ditches and storm drains that have become choked with sediment from soil erosion.



DEP INFORMATION SHEET

Appealing a Department Licensing Decision

Dated: November 2018

Contact: (207) 287-2452

SUMMARY

There are two methods available to an aggrieved person seeking to appeal a licensing decision made by the Department of Environmental Protection's (DEP) Commissioner: (1) an administrative process before the Board of Environmental Protection (Board); or (2) a judicial process before Maine's Superior Court. An aggrieved person seeking review of a licensing decision over which the Board had original jurisdiction may seek judicial review in Maine's Superior Court.

A judicial appeal of final action by the Commissioner or the Board regarding an application for an expedited wind energy development (35-A M.R.S. § 3451(4)) or a general permit for an offshore wind energy demonstration project (38 M.R.S. § 480-HH(1)) or a general permit for a tidal energy demonstration project (38 M.R.S. § 636-A) must be taken to the Supreme Judicial Court sitting as the Law Court.

This information sheet, in conjunction with a review of the statutory and regulatory provisions referred to herein, can help a person to understand his or her rights and obligations in filing an administrative or judicial appeal.

I. ADMINISTRATIVE APPEALS TO THE BOARD

LEGAL REFERENCES

The laws concerning the DEP's *Organization and Powers*, 38 M.R.S. §§ 341-D(4) & 346; the *Maine Administrative Procedure Act*, 5 M.R.S. § 11001; and the DEP's *Rules Concerning the Processing of Applications and Other Administrative Matters* ("Chapter 2"), 06-096 C.M.R. ch. 2.

DEADLINE TO SUBMIT AN APPEAL TO THE BOARD

The Board must receive a written appeal within 30 days of the date on which the Commissioner's decision was filed with the Board. Appeals filed more than 30 calendar days after the date on which the Commissioner's decision was filed with the Board will be dismissed unless notice of the Commissioner's license decision was required to be given to the person filing an appeal (appellant) and the notice was not given as required.

HOW TO SUBMIT AN APPEAL TO THE BOARD

Signed original appeal documents must be sent to: Chair, Board of Environmental Protection, 17 State House Station, Augusta, ME 04333-0017. An appeal may be submitted by fax or e-mail if it contains a scanned original signature. It is recommended that a faxed or e-mailed appeal be followed by the submittal of mailed original paper documents. The complete appeal, including any attachments, must be received at DEP's offices in Augusta on or before 5:00 PM on the due date; materials received after 5:00 pm are not considered received until the following day. The risk of material not being received in a timely manner is on the sender, regardless of the method used. The appellant must also send a copy of the appeal documents to the Commissioner of the DEP; the applicant (if the appellant is not the applicant in the license proceeding at issue); and if a hearing was held on the application, any intervenor in that hearing process. All of the information listed in the next section of this information sheet must be submitted at the time the appeal is filed.

INFORMATION APPEAL PAPERWORK MUST CONTAIN

Appeal materials must contain the following information at the time the appeal is submitted:

1. *Aggrieved Status.* The appeal must explain how the appellant has standing to maintain an appeal. This requires an explanation of how the appellant may suffer a particularized injury as a result of the Commissioner's decision.
2. *The findings, conclusions, or conditions objected to or believed to be in error.* The appeal must identify the specific findings of fact, conclusions regarding compliance with the law, license conditions, or other aspects of the written license decision or of the license review process that the appellant objects to or believes to be in error.
3. *The basis of the objections or challenge.* For the objections identified in Item #2, the appeal must state why the appellant believes that the license decision is incorrect and should be modified or reversed. If possible, the appeal should cite specific evidence in the record or specific licensing requirements that the appellant believes were not properly considered or fully addressed.
4. *The remedy sought.* This can range from reversal of the Commissioner's decision on the license or permit to changes in specific permit conditions.
5. *All the matters to be contested.* The Board will limit its consideration to those matters specifically raised in the written notice of appeal.
6. *Request for hearing.* If the appellant wishes the Board to hold a public hearing on the appeal, a request for public hearing must be filed as part of the notice of appeal, and must include an offer of proof in accordance with Chapter 2. The Board will hear the arguments in favor of and in opposition to a hearing on the appeal and the presentations on the merits of an appeal at a regularly scheduled meeting. If the Board decides to hold a public hearing on an appeal, that hearing will then be scheduled for a later date.
7. *New or additional evidence to be offered.* If an appellant wants to provide evidence not previously provided to DEP staff during the DEP's review of the application, the request and the proposed evidence must be submitted with the appeal. The Board may allow new or additional evidence, referred to as supplemental evidence, to be considered in an appeal only under very limited circumstances. The proposed evidence must be relevant and material, and (a) the person seeking to add information to the record must show due diligence in bringing the evidence to the DEP's attention at the earliest possible time in the licensing process; or (b) the evidence itself must be newly discovered and therefore unable to have been presented earlier in the process. Specific requirements for supplemental evidence are found in Chapter 2 § 24.

OTHER CONSIDERATIONS IN APPEALING A DECISION TO THE BOARD

1. *Be familiar with all relevant material in the DEP record.* A license application file is public information, subject to any applicable statutory exceptions, and is made easily accessible by the DEP. Upon request, the DEP will make application materials available during normal working hours, provide space to review the file, and provide an opportunity for photocopying materials. There is a charge for copies or copying services.
2. *Be familiar with the regulations and laws under which the application was processed, and the procedural rules governing your appeal.* DEP staff will provide this information on request and answer general questions regarding the appeal process.
3. *The filing of an appeal does not operate as a stay to any decision.* If a license has been granted and it has been appealed, the license normally remains in effect pending the processing of the appeal. Unless a stay of the decision is requested and granted, a license holder may proceed with a project pending the outcome of an appeal, but the license holder runs the risk of the decision being reversed or modified as a result of the appeal.

WHAT TO EXPECT ONCE YOU FILE A TIMELY APPEAL WITH THE BOARD

The Board will formally acknowledge receipt of an appeal, and will provide the name of the DEP project manager assigned to the specific appeal. The notice of appeal, any materials accepted by the Board Chair as supplementary evidence, any materials submitted in response to the appeal, and relevant excerpts from the DEP's application review file will be sent to Board members with a recommended decision from DEP staff. The appellant, the license holder if different from the appellant, and any interested persons are notified in advance of the date set for Board consideration of an appeal or request for public hearing. The appellant and the license holder will have an opportunity to address the Board at the Board meeting. With or without holding a public hearing, the Board may affirm, amend, or reverse a Commissioner decision or remand the matter to the Commissioner for further proceedings. The Board will notify the appellant, the license holder, and interested persons of its decision.

II. JUDICIAL APPEALS

Maine law generally allows aggrieved persons to appeal final Commissioner or Board licensing decisions to Maine's Superior Court (see 38 M.R.S. § 346(1); 06-096 C.M.R. ch. 2; 5 M.R.S. § 11001; and M.R. Civ. P. 80C). A party's appeal must be filed with the Superior Court within 30 days of receipt of notice of the Board's or the Commissioner's decision. For any other person, an appeal must be filed within 40 days of the date the decision was rendered. An appeal to court of a license decision regarding an expedited wind energy development, a general permit for an offshore wind energy demonstration project, or a general permit for a tidal energy demonstration project may only be taken directly to the Maine Supreme Judicial Court. See 38 M.R.S. § 346(4).

Maine's Administrative Procedure Act, DEP statutes governing a particular matter, and the Maine Rules of Civil Procedure must be consulted for the substantive and procedural details applicable to judicial appeals.

ADDITIONAL INFORMATION

If you have questions or need additional information on the appeal process, for administrative appeals contact the Board's Executive Analyst at (207) 287-2452, or for judicial appeals contact the court clerk's office in which your appeal will be filed.

Note: The DEP provides this INFORMATION SHEET for general guidance only; it is not intended for use as a legal reference. Maine law governs an appellant's rights.

Regrading Fill & Excavation Quantity Calculations

Based on my professional experience, I prepared the quantities stated below using the following procedures:

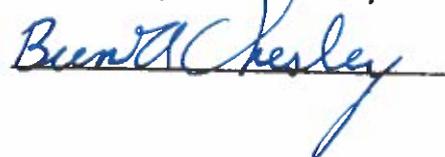
1. A topographic survey was completed of the existing site and the existing contours were plotted on a plan.
2. Baselines were plotted on the plan so that the project could be broken down into 3 areas so that the "End Area" Method could be used where regrading will occur.
3. Cross sections were plotted with existing grades for stations on the baselines where excavation & fill areas start, make abrupt changes and end.
4. Proposed grades were drawn on by hand in pencil with walls and granite landscaping blocks shown in hatch marks.
5. End Areas of Fill & Excavation areas of cross sections were determined using a Rollup II and Quikruler digitizer system with walls and granite landscaping blocks excluded.
6. Cross Section End areas were entered into spreadsheets with formulas to calculate the quantities of fill and excavation for the regrading.

Quantity Summary

| | Fill | Excavation |
|--------------------|---------------|----------------|
| EAST | 64.75cy | 6.84cy |
| SOUTH | 8.09cy | 0.54cy |
| WEST | <u>5.18cy</u> | <u>10.31cy</u> |
| Fill & Exc. Totals | 78.02cy | 17.69cy |

GRAND TOTAL ALL FILL & EXCAVATION 95.71CY

Prepared by: Brent Chesley



Douglas Hermann
#18 Clipper Cir
Yarmouth, ME 04096

Augusta DEP
State House Station
Augusta, Maine 04333-0017

October 9, 2000

Re: Questions on a Permit by Rule in China, Maine

Dear Sir or Madam:

In April of 1999 I requested a Permit by Rule for installing riprap on the shoreline of my property on China Lake. There was never a notification of the permit, but the check was cashed and the 14 day time period elapsed therefore I believe the permit is in effect.

Since this time nothing has been done in placing riprap. A sketch is attached which indicates how I would like to modify the design to maintain the shoreline and stop the erosion.

The question is, does this modification still fall under the Permit that I presently have?

Please have someone in the office contact me with an answer or any additional information required, if this is acceptable I would like to complete the work this Fall while the water level is low. If I do not hear otherwise by November 1, 2000 I will assume this is acceptable. Thank you in advance for your assistance.

Sincerely yours,


Doug Hermann

**DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP)
PERMIT BY RULE NOTIFICATION FORM**
(For use with DEP Regulation, Chapter 305)

PLEASE TYPE OR PRINT IN BLACK INK ONLY (3 COPIES, PLEASE BEAR DOWN)

| | | | |
|---|------------------------|--|-------------------------|
| Name of Applicant: Douglas R Hermann | | Name of Owner: SAME | |
| Mailing Address: #18 Clipper Cir | | Town/City: Yarmouth | |
| State: Maine | Zip Code: 04096 | Daytime Telephone No: 207-737-4471 (include area code) | |
| Name of Wetland, Water Body or Stream: China Lake | | | |
| Detailed Directions to Site: Route 202 to China Neck Rd to Fire Rd #3 First Gray House just as road bears left. Garage on right | | | |
| Town/City: China | Map #: 52 | Lot #: 01 | County: Kennebec |
| Description of Project: Shoreline is eroding. Slope the banks and install rip rap to maintain integrity | | | |

(CHECK ONE) This project: does does not involve work below mean low water.

I am filing notice of my intent to carry out work which meets the requirements for Permit By Rule (PBR) under DEP Regulation, Chapter 305. I have a copy of PBR Sections checked below. I have read and will comply with all of the standards.

- | | | |
|---|--|---|
| <input type="checkbox"/> Sec. (2) Soil Disturbance | <input checked="" type="checkbox"/> Sec. (7) Riprap | <input type="checkbox"/> Sec. (13) Piers & Pillings |
| <input type="checkbox"/> Sec. (3) Intake Pipes | <input type="checkbox"/> Sec. (8) Utility Crossing | <input type="checkbox"/> Sec. (14) Public Boat Ramps |
| <input type="checkbox"/> Sec. (4) Replacement of Structures | <input type="checkbox"/> Sec. (9) Stream Crossing | <input type="checkbox"/> Sec. (15) Select Sand Dune Projects |
| <input type="checkbox"/> Sec. (5) Movement of Rocks or Vegetation | <input type="checkbox"/> Sec. (10) State Transportation Facilities | <input type="checkbox"/> Sec. (16) Transfers/Permit Extension |
| <input type="checkbox"/> Sec. (6) Outfall Pipes | <input type="checkbox"/> Sec. (11) Restoration of Natural Areas | <input type="checkbox"/> Sec. (17) Maintenance Dredging |
| | <input type="checkbox"/> Sec. (12) Fish & Wild. Creation/Enhance | |

I authorize staff of the Departments of Environmental Protection, Inland Fisheries & Wildlife, and Marine Resources to access the project site for the purpose of determining compliance with the rules. I also understand that **this permit is not valid until approved by the Department or 14 days after receipt by the Department, whichever is less.**

I have attached all of the following required submittals. **NOTIFICATION FORMS CANNOT BE ACCEPTED WITHOUT THE NECESSARY ATTACHMENTS:**

- Attach** a check for ~~\$50~~ ^{\$25} (non-refundable) made payable to: "Treasurer, State of Maine".
- Attach** a U.S.G.S. topo map or Maine Atlas & Gazetteer map with the project site clearly marked.
- Attach** photographs showing existing site conditions (unless not required under standards).

| | |
|-------------------------------|----------------------|
| Signature of Applicant: _____ | Date: 4/23/95 |
|-------------------------------|----------------------|

Keep the bottom copy as a record of permit. Send the form with attachments via certified mail to the Maine Dept. of Environmental Protection at the appropriate regional office listed below. The DEP will send a copy to the Town Office as evidence of the DEP's receipt of notification. No further authorization by DEP will be issued after receipt of notice. Permits are valid for two years. Work carried out in violation of any standard is subject to enforcement action.

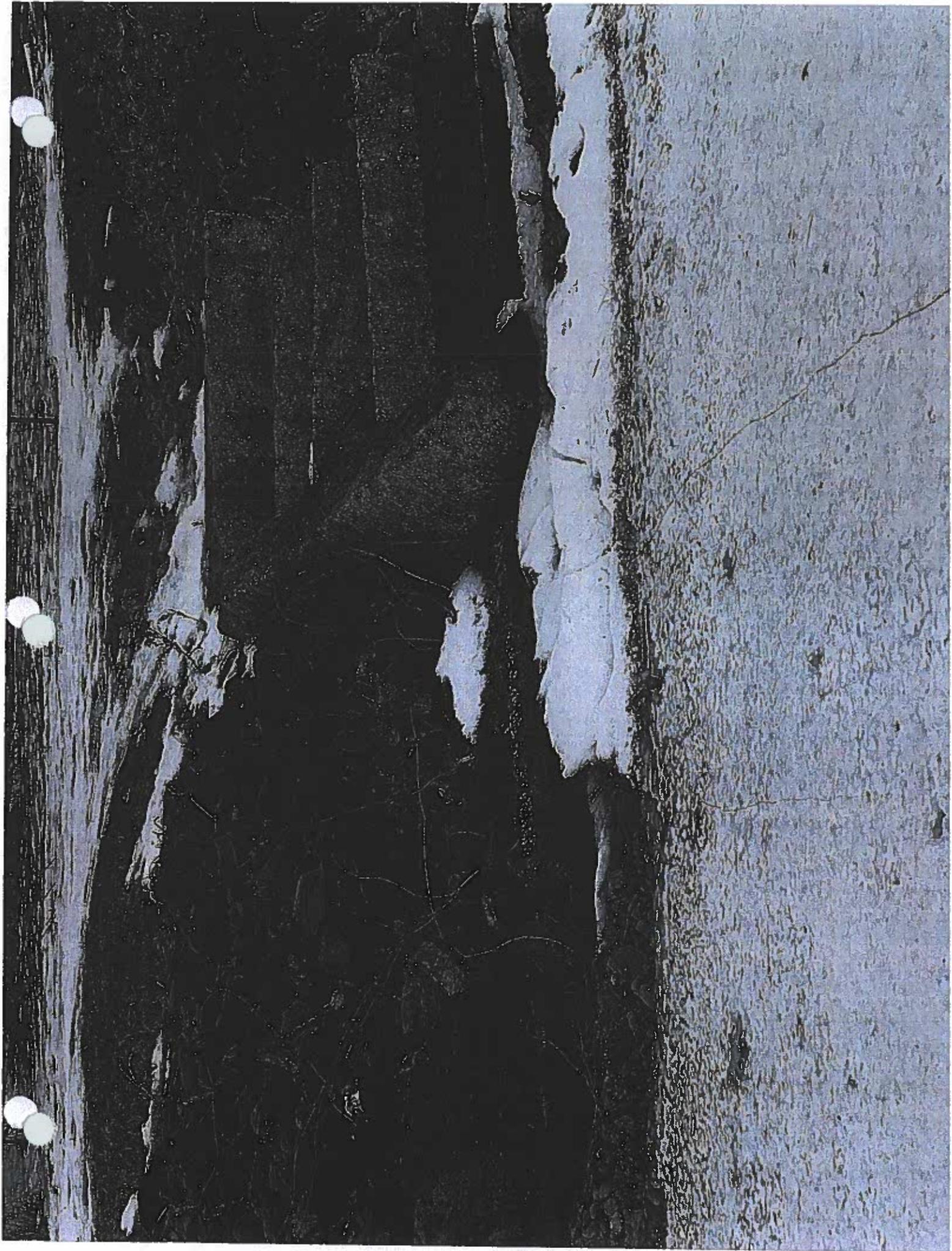
AUGUSTA DEP
STATE HOUSE STATION 17
AUGUSTA, ME 04333-0017
(207)287-2111

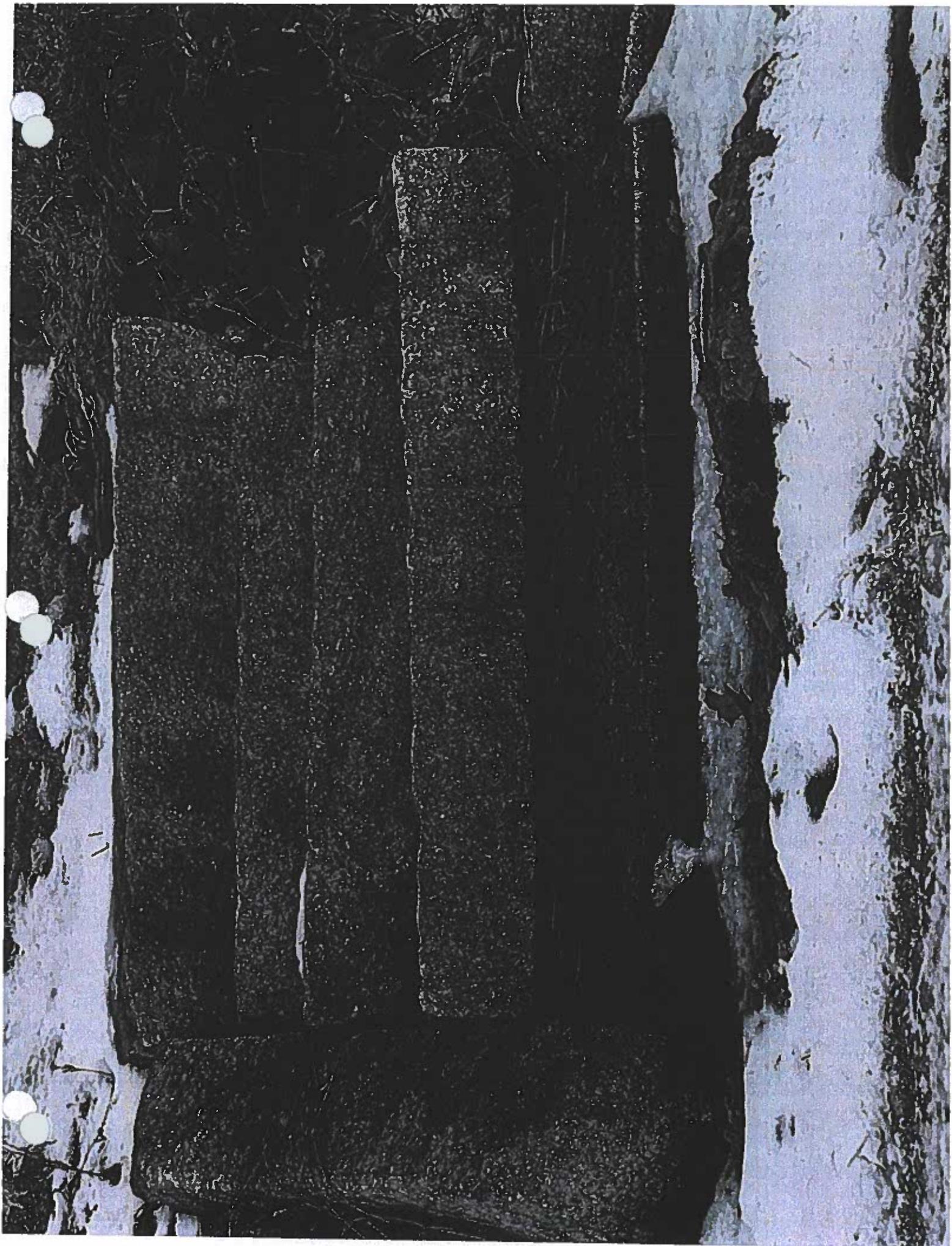
PORTLAND DEP
312 CANCO ROAD
PORTLAND, ME 04103
(207)822-6300

BANGOR DEP
106 HOGAN ROAD
BANGOR, ME 04401
(207)941-4570

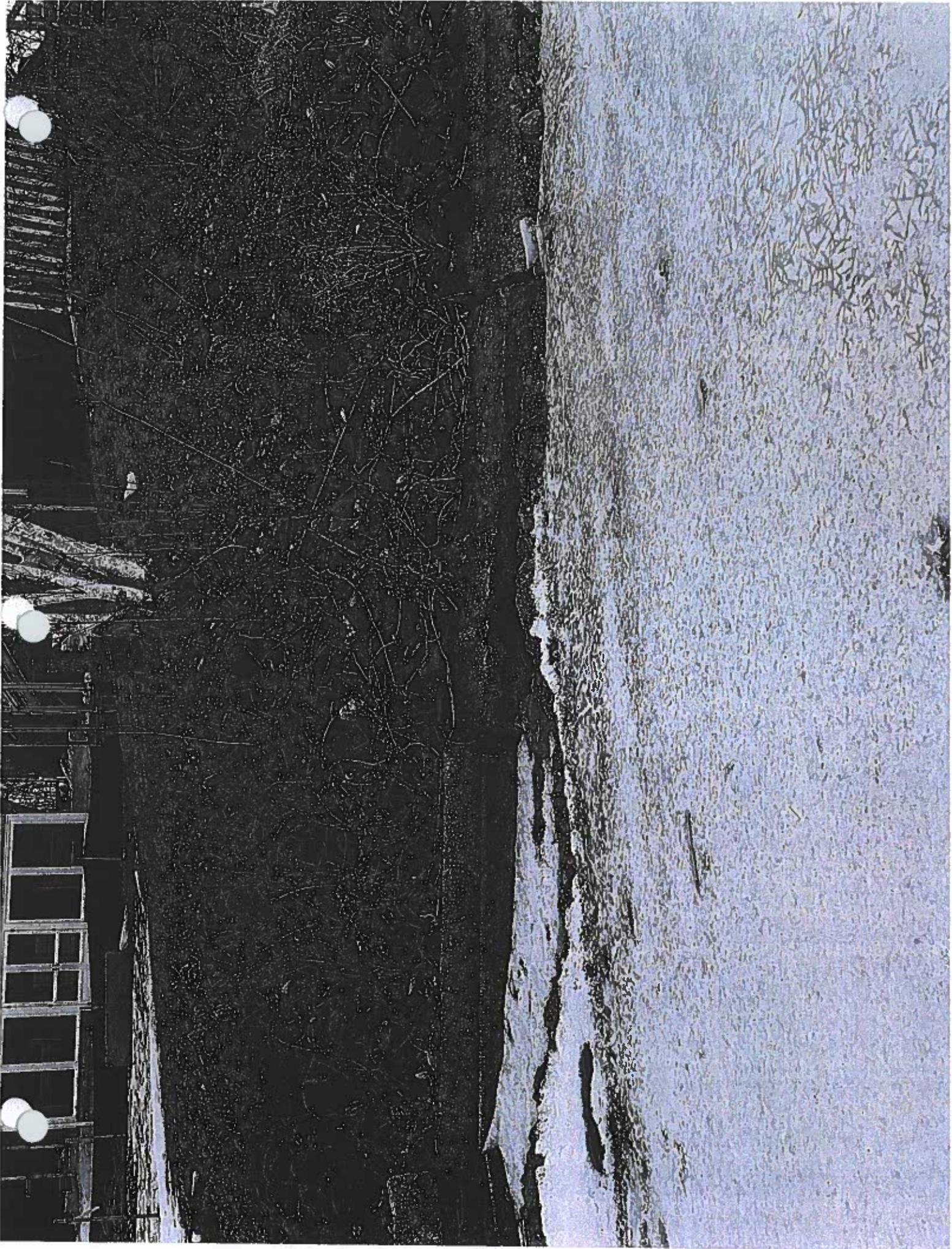
PRESQUE ISLE DEP
1235 CENTRAL DRIVE
PRESQUE ISLE, ME 04769
(207)764-0477

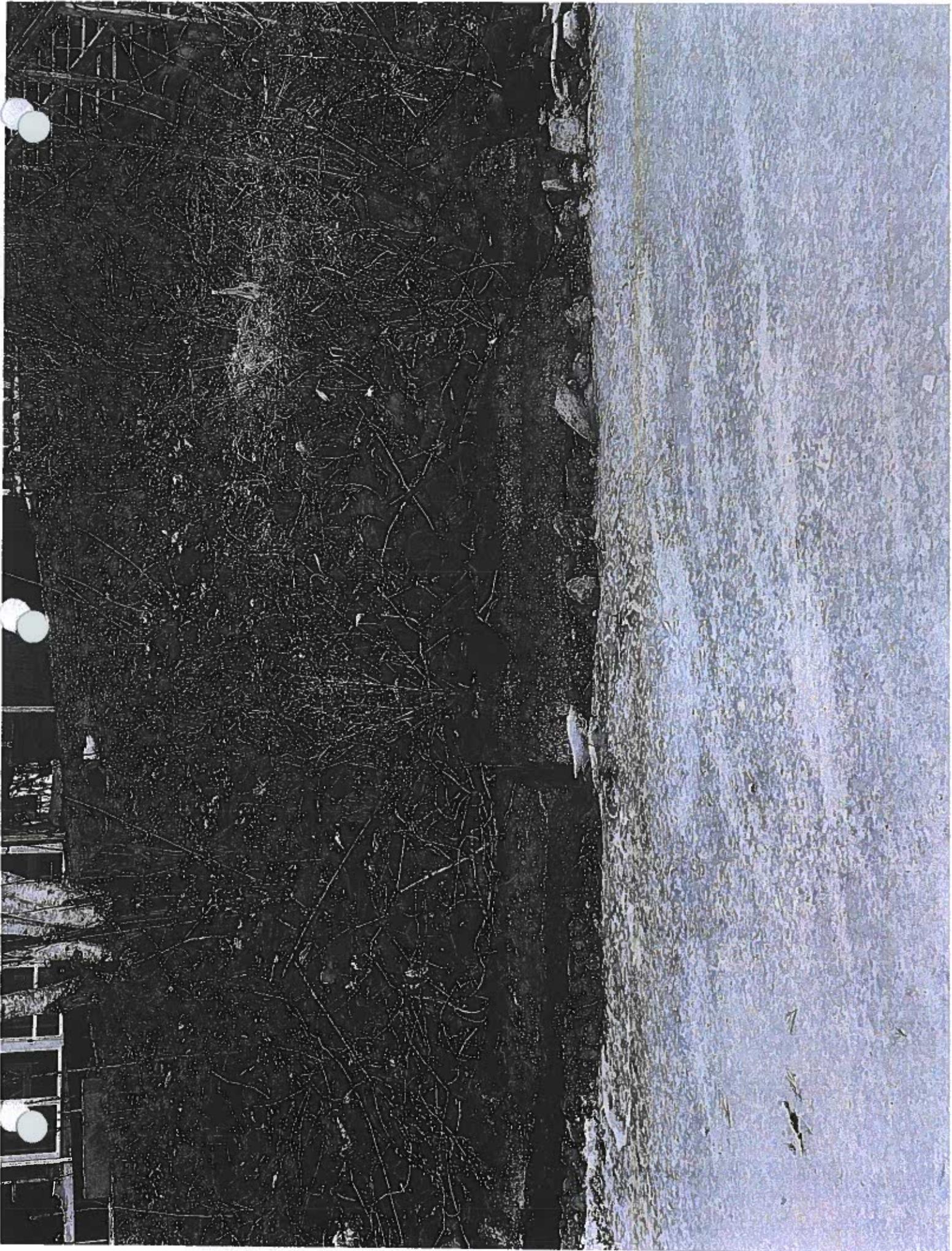
| | | | | | |
|-----------------|------|------|-----------|-----------|--------------|
| OFFICE USE ONLY | Ck.# | Date | Staff | Staff | After Photos |
| PBR # | FP | | Acc. Date | Del. Date | |





















100 foot Abutters List Report

China, ME
April 30, 2019

Subject Property:

Parcel Number: 52-019
CAMA Number: 52-019-1989-1
Property Address: 83 9th Fire Road (1989-1)

Mailing Address: CHESLEY, BRENT A
PO BOX 6241
CHINA VILLAGE, ME 04926

Abutters:

Parcel Number: 52-005
CAMA Number: 52-005-1975-1
Property Address: Neck Road (1975-1)

Mailing Address: Bradbury, Guy W
PO Box 129
Bridgewater, ME 04735

Parcel Number: 52-017
CAMA Number: 52-017-1987-1
Property Address: 146 9th Fire Road (1987-1)

Mailing Address: Margo R. Greene Revocable Trust
330 Richmond Avenue
South Orange, NJ 07079

Parcel Number: 52-018
CAMA Number: 52-018-1988-1
Property Address: 144 9th Fire Road (1988-1)

Mailing Address: Margo R. Greene Revocable Trust
330 Richmond Avenue
South Orange, NJ 07079

Parcel Number: 52-020
CAMA Number: 52-020-1990-1
Property Address: 85 9th Fire Road (1990-1)

Mailing Address: Cummings, Christopher M
22 Shamrock Hill
Woolwich, ME 04579

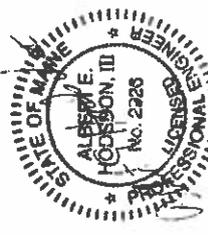
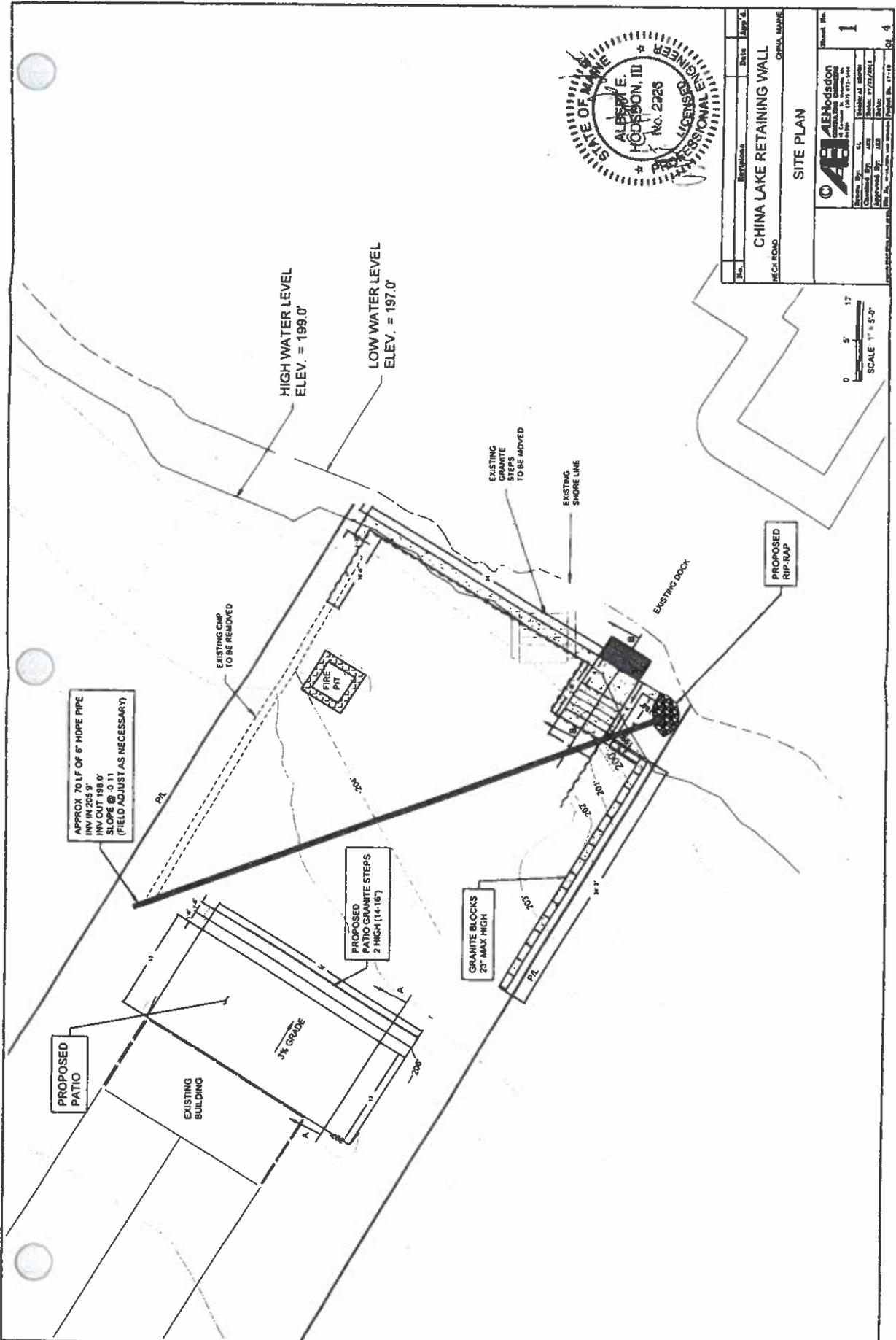
Parcel Number: 52-021
CAMA Number: 52-021-1991-1
Property Address: 87 9th Fire Road (1991-1)

Mailing Address: Bolyn, Anthony E, Jr & Nancy J
22 Fales Road
Plainville, MA 02762



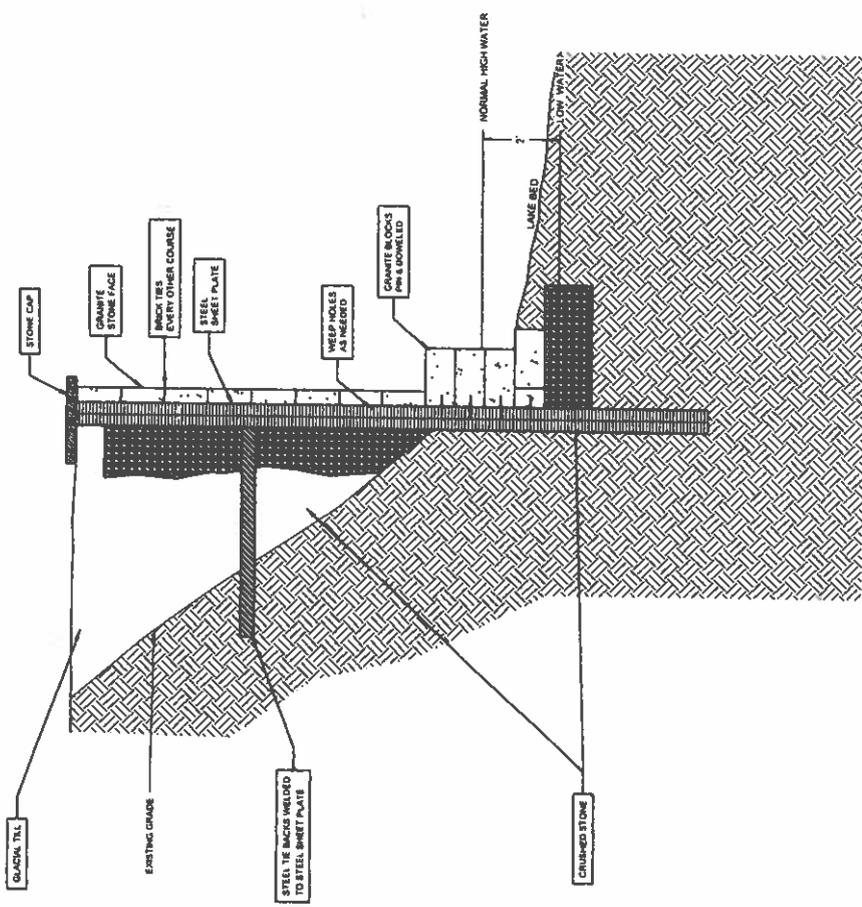
www.cai-tech.com

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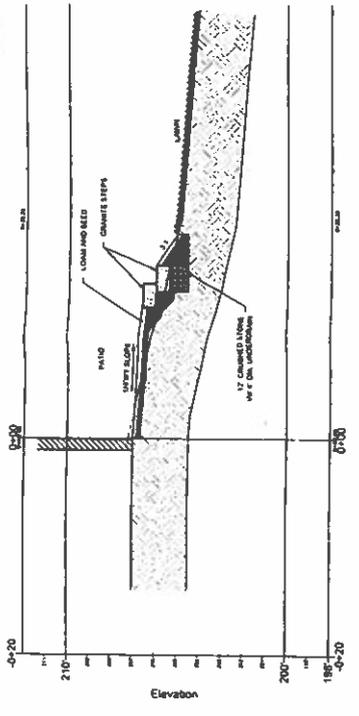


| | |
|-------------|---------------------------------|
| Sheet No. | 1 |
| Project No. | 17-18-CHINA LAKE RETAINING WALL |
| Client | CHINA LAKE |
| Location | CHINA LAKE |
| Scale | 1" = 5'-0" |
| Date | 7/22/2019 |
| Drawn By | GARY |
| Checked By | ALB |
| Approved By | ALB |
| Issue No. | 01 |
| Issue Date | 7/22/2019 |

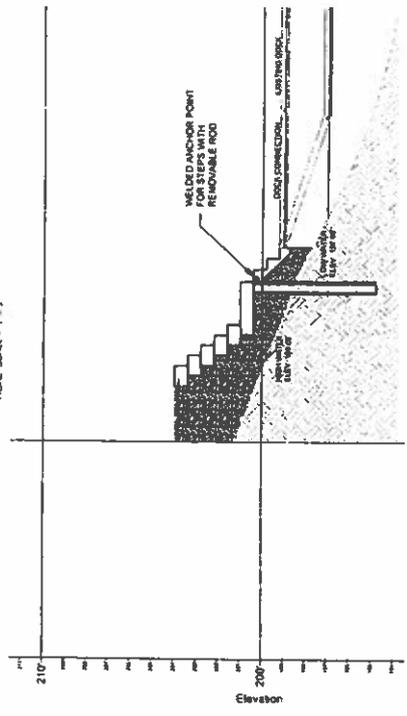
CHINA LAKE RETAINING WALL
SITE PLAN



TYPICAL CROSS SECTION OF RETAINING WALL
N.T.S.



PATIO CROSS SECTION A-A
1/4" SCALE = 1'-0"
NOTE SCALE = 1'-0"



STAIRS CROSS SECTION B-B

| | | | |
|-----|-------------|------|-------|
| No. | Description | Date | Sheet |
| | | | 2 |

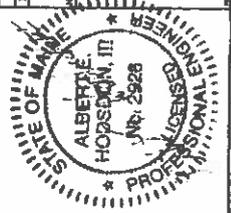
CHINA LAKE RETAINING WALL
CHINA LAKE

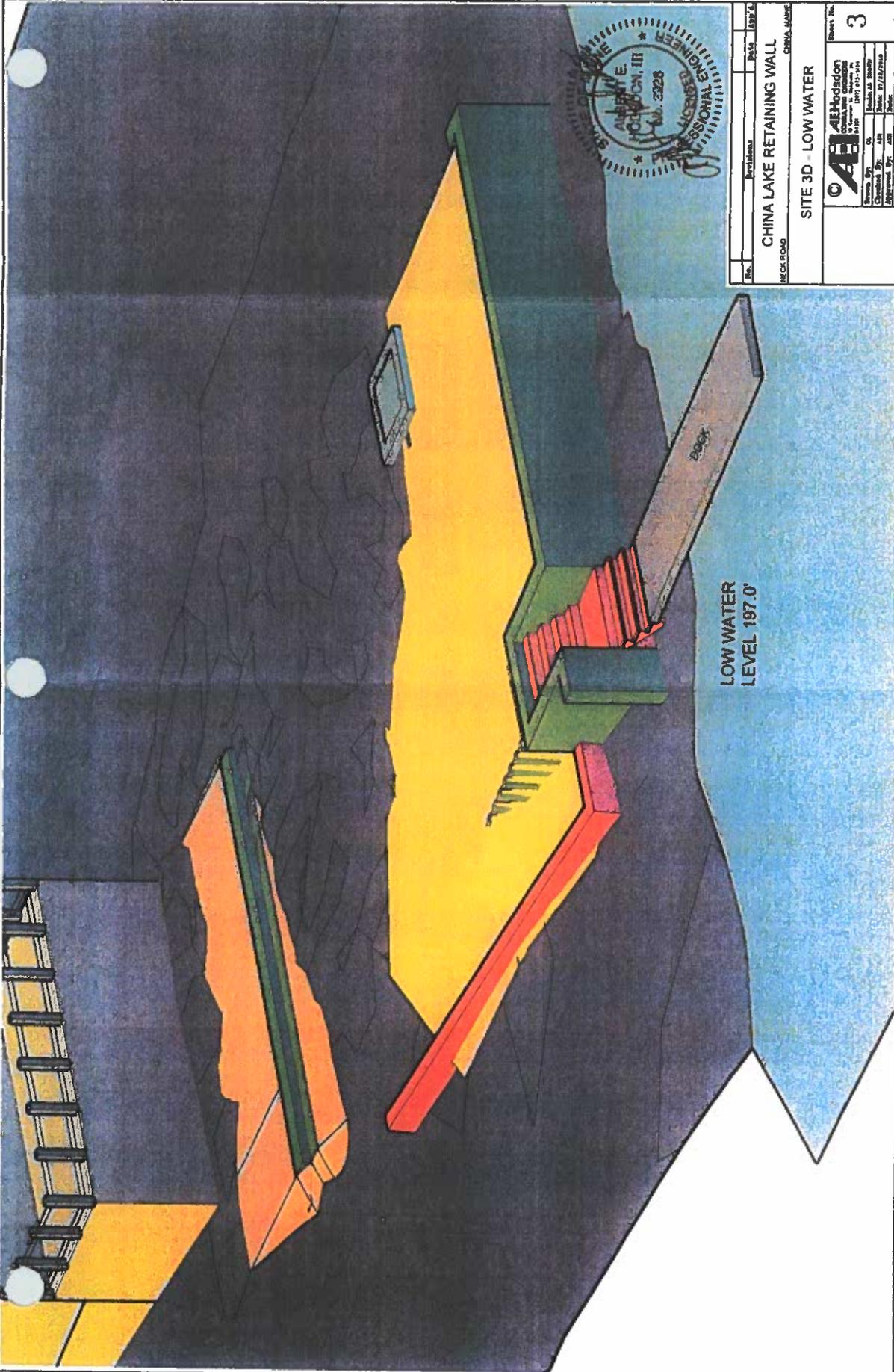
PROFILE & DETAILS

AEI Hodsdon
 10000 100th Ave. S.E.
 Bellevue, WA 98006
 Phone: (206) 835-3444
 Fax: (206) 835-3445
 Website: www.aehodsdon.com

Checked By: CL
 Drawn By: JAB
 Approved By: JAB
 Date: 07/22/2019

Sheet No. 2 OF 4





| | | | |
|-----|-----------|------|-------|
| No. | Revisions | Date | App'd |
| | | | |

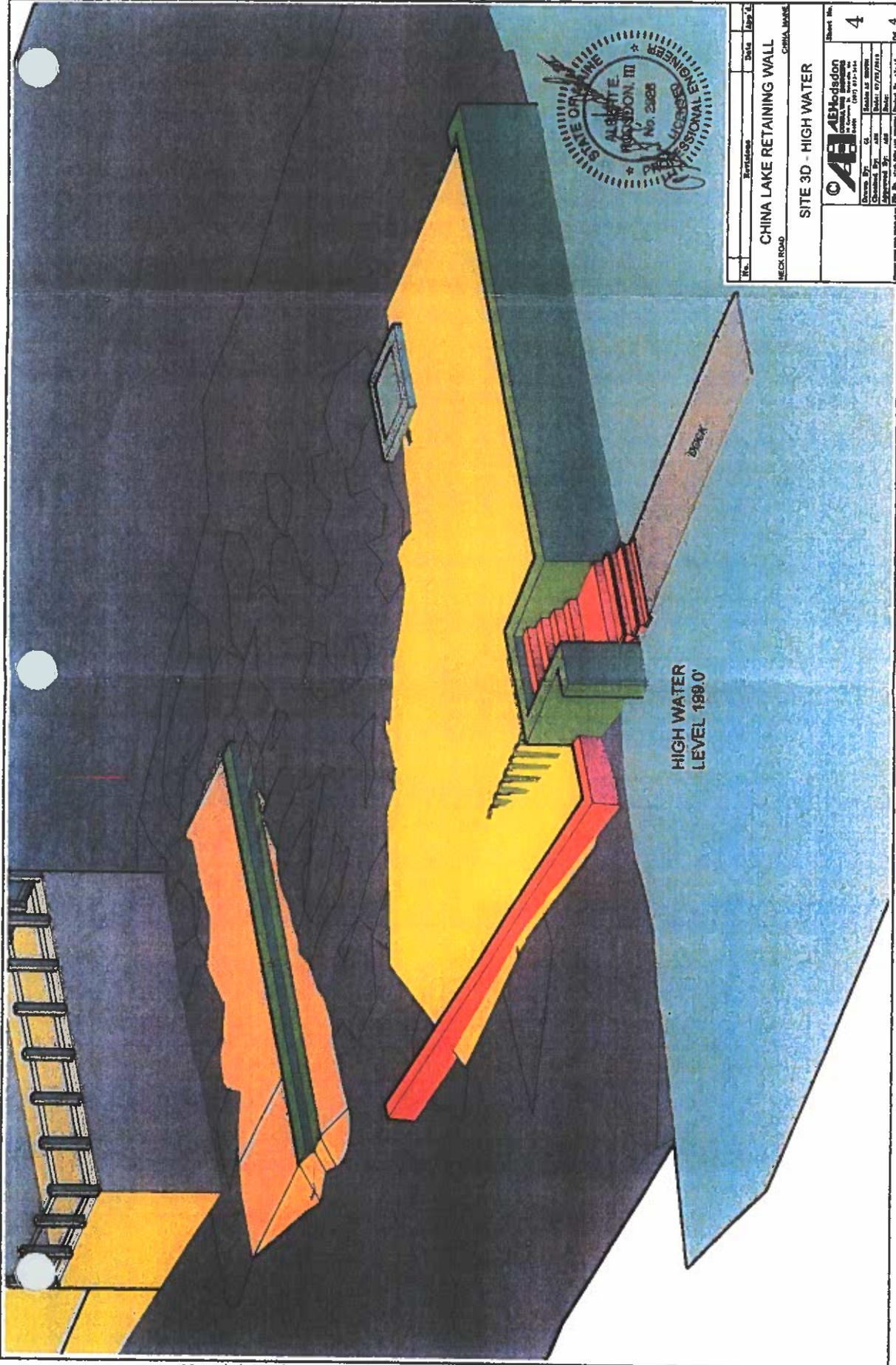
CHINA LAKE RETAINING WALL
MECK ROAD
CHINA, MAINE

SITE 3D - LOW WATER

AEH Houghton
Albert E. Houghton, III
Professional Engineer
License No. 2328
State of Maine

Drawn By: [blank]
Checked By: [blank]
Date: 07/22/2019

Sheet No. 3
Of 4



| | | | |
|---|----------|------|-----------|
| No. | Envelope | Date | App'd. |
| | | | |
| CHINA LAKE RETAINING WALL NECK ROAD CHINA LAKE | | | |
| SITE 3D - HIGH WATER | | | |
| | | | Sheet No. |
| Design By: G. Macdonald Checked By: J. Macdonald Approved By: AEM Date: 07/27/2018 Project No.: 17-11 | | | 4 |
| | | | Of 4 |