NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Environmental Permits, Region 4 1130 North Westcott Road, Schenectady, NY 12306-2014 P: (518) 357-2069 | F: (518) 357-2460 www.dec.ny.gov

July 26, 2019

Permit Transmitted by Email

Mayor Patrick Madden City of Troy 433 River Street, Suite 5000 Troy, NY 12180-2284 mayorsoffice@troyny.gov

RE: Modification to Article 15 Permits & Section 401 Water Quality Certification

Mount Ida Lake Dam Controlled Breach Poesten Kill, Class C(T) Stream DEC Permit ID# 4-3817-00113 City of Troy, Rensselaer County

Mayor Madden,

The Article 15 permit modifications that you applied for is enclosed. <u>Please read it carefully and note the new conditions that are included.</u> It is valid for only those activities authorized and is **effective July 26**, **2019 and will expire on January 17**, **2020**. Work beyond the scope of the permit and the approved project plans may be considered a violation of the law and subject to appropriate enforcement action.

Please be advised that the Uniform Procedures Regulations (6 NYCRR Part 621) provide that an applicant may request a public hearing if a permit is denied or contains conditions which are unacceptable to them. Any such request must be made in writing within 30 calendar days of the date of permit issuance and must be addressed to the Regional Permit Administrator at the letterhead address. A copy should also be sent to the Chief Administrative Law Judge at NYSDEC, 625 Broadway, 1st Floor, Albany, NY 12233-1550.

Also note that this permit does not eliminate the need to obtain any other federal, state or local permits or approvals that may be required for this project.

Please feel free to contact me at (518) 357-2459 or by email at kate.kornak@dec.ny.gov should you have any questions regarding the extent of the work authorized, or your obligations under the permit.

Sincerely,

Kate Kornak

Late Kornak

Deputy Regional Permit Administrator

encls: Article 15 Permits & Section 401 Water Quality Cert.

ecc: NYSDEC

US Army Corps of Engineers (NAN-2018-01501-USH) State Historic Preservation Office (18PR07458)

Schnabel Engineering





PERMIT

Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To: Facility:

CITY OF TROY MT IDA LAKE DAM

433 RIVER ST STE 5000 MT IDA LAKE/POESTEN KILL

TROY, NY 12180-2284 TROY, NY

Facility Location: in TROY in RENSSELAER COUNTY

Facility Principal Reference Point: NYTM-E: 608.2 NYTM-N: 4730.8

Latitude: 42°43'19.5" Longitude: 73°40'42.5"

Authorized Activity:

The authorized activity includes a phased partial-breach of the Mt. Ida Lake Dam, a timber spillway (135' long x 12' high) spanning the Poesten Kill which is a Class C(T) stream. Sediment will be removed upstream of the dam (approx. 300 cubic yards) using a long-reach excavator working from a temporary stone pad. Dredged sediment will be dewatered within the temporary gravel berm constructed along the shoreline. All work shall be performed in accordance with the approved plans and permit conditions contained herein.

Permit Authorizations

Stream Disturbance - Under Article 15, Title 5

Permit ID 4-3817-00113/00007

New Permit Effective Date: 1/18/2019 Expiration Date: 1/17/2020 Modification # 1 Effective Date: 7/26/2019 Expiration Date: 1/17/2020

Dam - Under Article 15, Title 5 Permit ID 4-3817-00113/00008

New Permit Effective Date: 1/18/2019 Expiration Date: 1/17/2020 Modification # 1 Effective Date: 7/26/2019 Expiration Date: 1/17/2020

Water Quality Certification - Under Section 401 - Clean Water Act

Permit ID 4-3817-00113/00009

New Permit Effective Date: 1/18/2019 Expiration Date: 1/17/2020 Modification # 1 Effective Date: 7/26/2019 Expiration Date: 1/17/2020



NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: KATE KORNAK, Deputy Permit Administrator

Address: NYSDEC Region 4 Headquarters

1130 N Westcott Rd Schenectady, NY 12306

Authorized Signature:	Date	7 / 26 / 2019

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

WATER QUALITY CERTIFICATION SPECIFIC CONDITION

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: STREAM DISTURBANCE; DAM; WATER QUALITY CERTIFICATION

- 1. Conformance With Plans All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by Schnabel Engineering of New York as detailed in the Approved Construction Documents condition below.
- 2. Notice of Intent to Commence Work The Permittee shall notify the Department 3 to 5 days prior to the commencement of work on the project by emailing Kate Kornak, kate.kornak@dec.ny.gov. The email needs to include the permit number, permittee name and the project start date.
- 3. Stream Work Period In-stream or stream bank work shall be accomplished only between June 15 and September 30 of each year the permit is in effect.
- **4. Storm Event Preparation** In the event of a forecasted 10+ year storm, the following shall be removed prior to storm arrival: filter berm, sediment within filter berm, and excavation pad.
- **5. Supervision by P.E.** All construction activities at the site shall be supervised by an individual licensed to practice engineering in the State of New York.



- **6. Approved Construction Documents** All work shall be accomplished in strict conformance with the approved construction documents, as follows:
 - Schnabel Engineering letter report "Ida Lake Dam Lake Lowering Plan" stamped and signed by Michael S. Quinn, P.E. (NYS PE# 067524); dated October 25, 2018 and revised November 12, 2018.
 - Schnabel Engineering email "Creek Flow Criteria for Work" email from Michael S. Quinn, P.E. to Kate Kornak; dated December 4, 2018.
 - Schnabel Engineering Memorandum "Ida Lake Dam Project-Specific Sampling and Analysis Plan" stamped and signed by Michael S. Quinn, P.E.; dated May 16, 2019 and revised June 11, 2019.
 - Drawings entitled "Ida Lake Lowering Plan June 2019" set of two drawings by Schnabel Engineering. Drawing sheets "Sheet 1 of 2" and "Sheet 2 of 2" including Phasing Specifications as included on the drawings; stamped and signed by Michael S. Quinn, P.E.; revised and dated June 2019.

Schnabel Engineering Schedule "Ida Lake Dam - Proposed Schedule for Dam Safety Compliance"; revised and dated July 10, 2019.

7. **Spoils Disposal** All dredged sediments must be disposed at an appropriate location based on results of the sediment sampling and analysis plan.

STREAM DISTURBANCE CONDITIONS

8. Stream Protection Requirements

- **A. Minimize Stream Disturbance** Disturbance to the bed and banks of the stream shall be kept to the minimum necessary to complete the project.
- **B. No Turbidity** There shall be no discernable change in turbidity based on visible contrast. The water below the stream work site shall remain as clear as the flowing water above the stream work site.
- **C. Equipment Operation** Equipment operation in the active channel is prohibited. Equipment may operate from the proposed gravel pad, and only the bucket may enter the water.
- **D. Removal of Temporary Structures** Within 15-days of dam breach, all fill associated with the stone excavator pad, filter gravel berm, and temporary coffer dams shall be removed from the jurisdictional area.
- **E. Site Grading and Seeding -** All areas of soil disturbance resulting from this project shall be shaped and/or graded, seeded, and covered with straw or other pre-approved wee-free mulch within one week of final grading. The mulch material shall be maintained until stabilized vegetative cover is established.
- **9. Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.



DAM SAFETY CONDITIONS

- 10. Substantial Deviations Any substantial deviation from the approved construction documents must be approved in writing by the Dam Safety Section prior to implementation. All deviations from the approved plans shall be indicated in the "as-built" records.
- 11. Dam Safety Section Contact Information When used in this permit, the contact information for the Dam Safety Section is:

Dam Safety Section NYSDEC Headquarters 625 Broadway Albany, NY12233

- 12. Construction Engineer Within two weeks of the date of permit issuance, the permittee shall notify the Dam Safety Section, by certified mail (return receipt requested), of the name, address, telephone number and license number of the registered professional engineer responsible for oversight of the dam construction work (construction engineer) and for submission of the construction certification and "asbuilt" records required under this permit.
- 13. Construction Schedule Within two weeks before the start of construction, the Dam Safety Section must be provided with a construction schedule indicating timing of major work items. Updated schedules shall be provided as needed to indicate significant changes to the schedule.
- **14. Construction Reports** Construction reports shall be submitted to the Dam Safety Section on a biweekly basis and shall, at a minimum, consist of:
 - a summary of major work completed;
 - a summary of observations made by the on-site representative;
 - a summary of observations made by the construction engineer during his/her site inspections;
 - construction photos; and
 - copies of all lab and field test results.
- 15. Inspection & Maintenance (I&M) Plan Within two weeks before completion of work, the permittee shall submit to the Dam Safety Section an acceptable I&M Plan. The I&M Plan should call for additional safety inspections during major storms.
- 16. Completion of Work Within two weeks after the completion of the permitted work, the permittee shall provide the Dam Safety Section by certified mail (return receipt requested) an original signed and sealed statement from the construction engineer that the project has been completely constructed under his/her care and supervision and in accordance with the construction documents approved by the Department ("certification"), with a copy to the Regional Permit Administrator.
- 17. **As-Built Records** Within four weeks after completion of the permitted work, the permittee shall provide to the Dam Safety Section, one complete set of "as-built" records. "As-built" records shall include at a minimum: photos of major work items and record drawings, on paper and in electronic format.

The "as-built" records shall be signed and sealed by the construction engineer and shall include identification of all changes to the approved construction documents.



18. Engineering Assessment As determined by the Schedule listed in the Approved Construction Documents condition, or by 9-months after dam breach, whichever is soonest, the permittee shall submit to the Regional Permit Administrator a plan to decommission the dam *or* an Engineering Assessment of the dam as configured with a schedule of recommended rehabilitation work, as applicable.

POST-CONSTRUCTION ADVISEMENTS

- 19. State May Order Removal or Alteration of Work If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.
- 20. State May Require Site Restoration If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may lawfully require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.
- 21. State Not Liable for Damage The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

WATER QUALITY CERTIFICATION SPECIFIC CONDITIONS

1. Water Quality Certification The authorized project, as conditioned pursuant to the Certificate, complies with Section 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act, as amended and as implemented by the limitations, standards, and criteria of state statutory and regulatory requirements set forth in 6 NYCRR Section 608.9(a). The authorized project, as conditioned, will also comply with applicable New York State water quality standards, including but not limited to effluent limitations, best usages and thermal discharge criteria, as applicable, as set forth in 6 NYCRR Parts 701, 702, 703, and 704.



GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

- 2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.
- 3. Applications For Permit Renewals, Modifications or Transfers The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator NYSDEC Region 4 Headquarters 1130 N Westcott Rd Schenectady, NY12306

- **4. Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Dam, Stream Disturbance, Water Quality Certification.
- **5. Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:
 - a. materially false or inaccurate statements in the permit application or supporting papers;
 - b. failure by the permittee to comply with any terms or conditions of the permit;
 - c. exceeding the scope of the project as described in the permit application;
 - d. newly discovered material information or a material change in environmental conditions,



relevant technology or applicable law or regulations since the issuance of the existing permit;

- e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.
- **6. Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification

The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit

The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits

The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights

This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.

THE PHASED SEQUENCE PRESENTED BELOW SUPERSEDES THE IDA LAKE LOWERING PLAN SUBMITTED NOVEMBER 12, 2018 AS A REVISION TO THE OCTOBER 25, 2018 PLAN. THIS LAKE LOWERING PLAN IS ACCOMPANIED BY THE IDA LAKE DAM PROJECT-SPECIFIC SAMPLING AND ANALYSIS PLAN (REVISED JUNE 11, 2019)

PHASE 1:

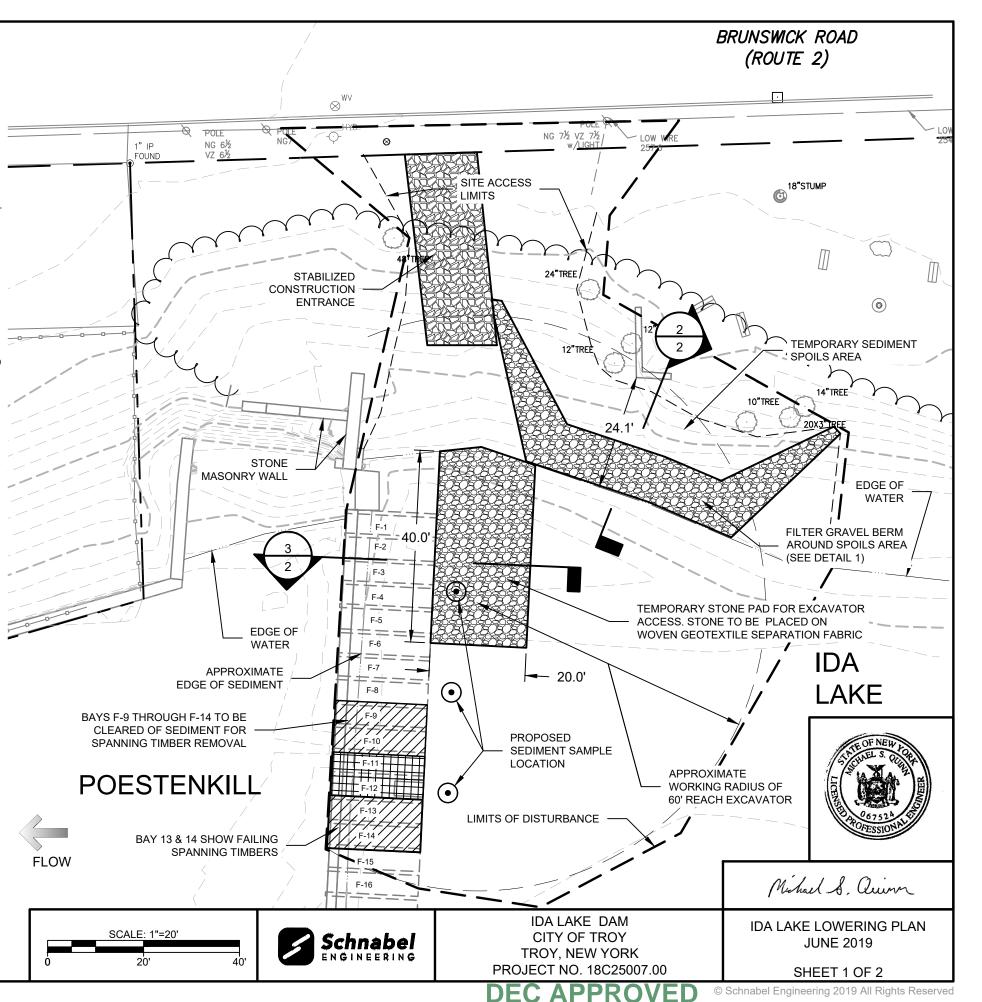
- MOBILIZE TO THE DAM, SET UP SAFETY LINES ACROSS THE POESTEN KILL AND STAGING AREA ON THE RIGHT SIDE OF THE DAM.
- SEAWAY WILL POSITION A FLOATING DIVERS WORK PLATFORM IN WATER FROM THE RIGHT ABUTMENT UPSTREAM OF THE DAM. SCHNABEL WILL COLLECT 3 SEDIMENT SAMPLES AT THE LOCATIONS SHOWN ON THE PLAN FOR CHEMICAL ANALYSIS.
- SEAWAY TO TRANSPORT AND SET SANDBAGS ON CREST OF THE SPILLWAY ACROSS BAYS F-8
 THROUGH F-15 TO DIVERT FLOW OVER SPILLWAY AWAY FROM WORK AREA BENEATH THESE BAYS.
- 4. SEAWAY TO TRANSPORT $\frac{3}{4}$ INCH PRESSURE-TREATED PLYWOOD SHEETING AND 2X4S TO WORK AREA FOR INSTALLATION WITHIN BAYS F-8 AND F-15. PLYWOOD AND 2X4S USED FOR CONSTRUCTION OF TEMPORARY RIGHT AND LEFT TRAINING WALLS FASTENED TO BENTS F-8/F-9 AND F-14/F-15.
- 5. SEAWAY TO SET UP TEMPORARY COFFER DAMS (I.E. BULKHEAD FRAME SUPPORTING TIMBER PLANKS TO SPAN TWO BAYS). TWO BULKHEAD SETUPS WILL BE CONSTRUCTED ACROSS BAYS F-9 & F-10 AND F-13 & F-14 AS SHOWN ON THE PLAN.
- 6. WITH BULKHEADS IN PLACE THE COFFERED SECTION OF THE DAM FACE WILL BE DRAINED AND SPANNING TIMBERS (I.E. 2X8 AND 4X8 PLANKING) WILL BE CUT AND REMOVED TO CREATE A 2' X 10' HOLE IN THE DAM FACE AT EACH COFFER DAM SETUP. WHEN REMOVALS ARE COMPLETE THE BULKHEAD PLANKS WILL BE REMOVED TO ALLOW CREEK FLOW TO PASS THROUGH THE INITIAL DAM BREACH (DIAGONAL HATCH ON PLAN). TIMBER DEBRIS REMOVED FROM DAM WILL BE STAGED ON RIGHT SHORE BY SEAWAY. THE CITY WILL BE RESPONSIBLE FOR PROVIDING DISPOSAL OF THESE MATERIALS.
- 7. THE INITIAL SPANNING TIMBER REMOVAL WILL NOT EXCEED 3 BOARD WIDTHS (4"X8" TIMBERS). NOTE THAT THE STEEL CREST PLATE AND TOP HORIZONTAL STRUCTURAL BENT TIMBER (MEMBER 6) WILL REMAIN IN PLACE TO MAINTAIN LATERAL SUPPORT ACROSS THE 30' BREACH SPAN.
- 8. WITH DRAWDOWN OF IDA LAKE THE CENTER SPANNING TIMBERS (SQUARES HATCH) WILL BE CUT AND REMOVED TO EXPAND THE BREACH TO 30 FEET.

PHASE 2:

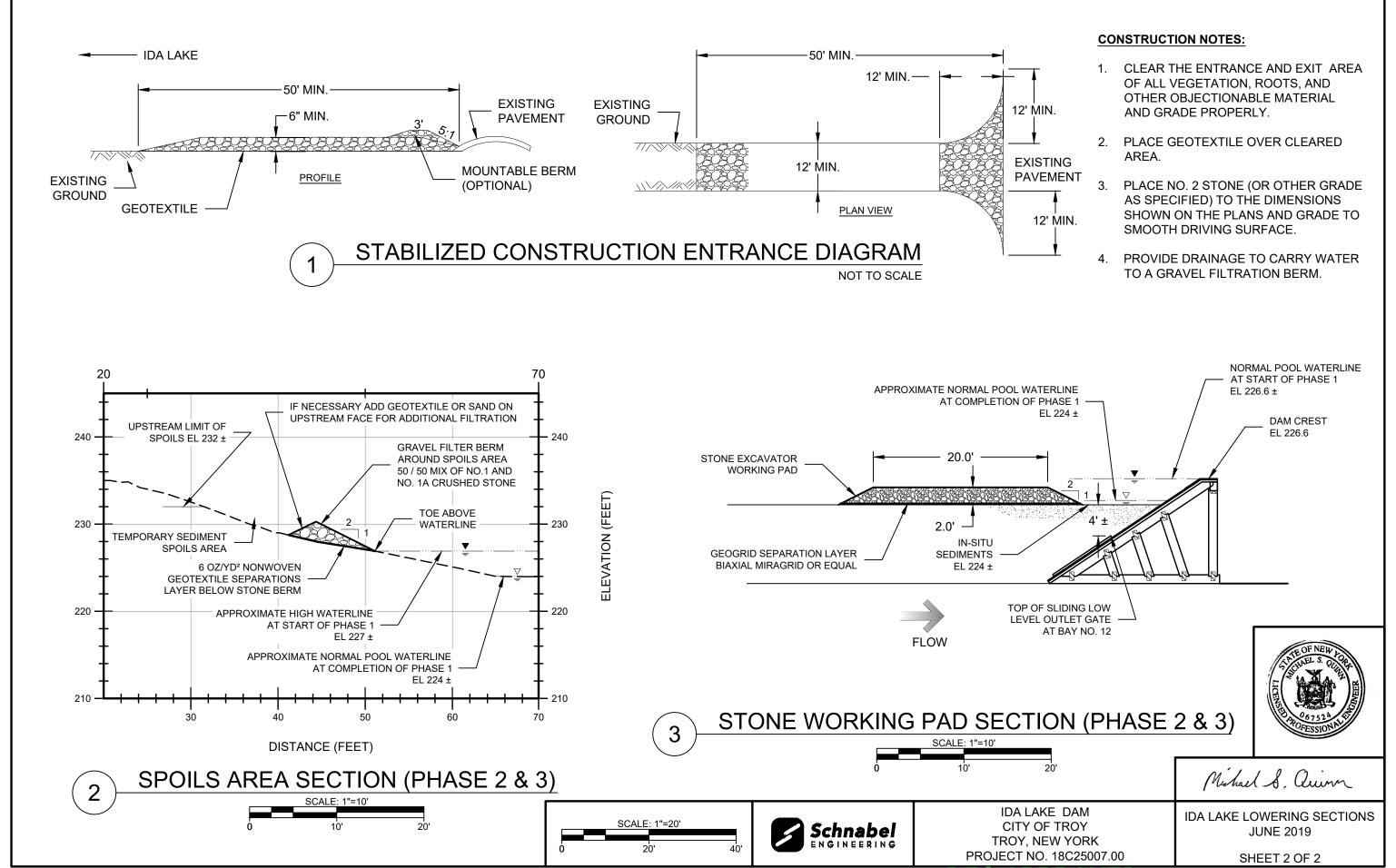
- 9. AT THE COMPLETION OF PHASE 1 THE INITIAL 30' BREACH WILL ALLOW IDA LAKE TO DRAWDOWN 2.5' TO 3.5' (I.E. TO JUST ABOVE THE EXISTING SEDIMENT LEVEL IN FRONT OF THE DAM).
- 10. AT THE DIRECTION OF SCHNABEL THE CITY DPW WILL CONSTRUCT A SEDIMENT FILTRÁTION BERM ON THE RIGHT ABUTMENT AND A STONE WORKING PAD AS LOCATED AND IN ACCORDANCE WITH THIS PLAN AND DETAILS. IF NECESSARY, FILTER BERM WILL INCLUDE A FILTER GEOTEXTILE OR SAND LAYER ON THE UPSTREAM FACE TO PROVIDE GREATER FILTRATION OF SEDIMENT.
- 11. ONCE THE STONE WORKING PAD IS COMPLETE THE CITY DPW WILL PROVIDE A LONG STICK EXCAVATOR (60' REACH) AND OPERATOR TO PERFORM SEDIMENT REMOVAL IMMEDIATELY IN FRONT OF THE DAM AT BAYS F-9 THROUGH F-14 TO EXPOSE MORE UPSTREAM TIMBER FACE FOR DOWNWARD EXPANSION OF THE INITIAL BREACH.
- 12. EXCAVATED SEDIMENT FROM IMMEDIATELY IN FRONT OF AND ON THE UPSTREAM DAM FACE WILL BE PLACED BEHIND THE SEDIMENT FILTRATION BERM AND BE ALLOWED TO DRAIN PRIOR TO BEING LOADED AND TRUCKED TO THE WARREN FANE PIT OR SIMILAR LOCATION IN TROY FOR DISPOSAL.
- 13. ONCE SUFFICIENT UPSTREAM DAM FACE HAS BEEN EXPOSED FOR ADDITIONAL SPANNING TIMBER REMOVAL THE TEMPORARY BULKHEADS WILL AGAIN BE SET UP BELOW THE INITIAL BREACH LEVEL, AND STEPS NO. 6 AND 8 ABOVE WILL PRE PERFORMED TO SEQUENTIALLY EXPAND THE BREACH OPENING TO A NEW LOWER CREST ELEVATION.

PHASE 3:

- 14. IDA LAKE LOWERING, DAM BREACH EXPANSION AND SEDIMENT EXCAVATION WILL PROGRESS AS DESCRIBED IN PHASE 2 TO THE TOP OF THE EXISTING LOW-LEVEL OUTLET GATE LOCATED AT BAY F-12
- 15. WITH EXPOSURE OF THE LOW-LEVEL OUTLET GATE SCHNABEL WILL ASSESS THE CONDITION OF THE GATE AND REMAINING SPANNING TIMBERS ACROSS BAYS F-9 THROUGH F-14 TO DETERMINE A FINAL BREACH CREST ELEVATION.
- 16. SEAWAY WILL REMOVE THE FLOATING DIVERS WORK PLATFORM AND DEMOBILIZE AT THE DIRECTION OF SCHNABEL.
- 17. WITH IDA LAKE DRAWN DOWN TO A FINAL BREACH ELEVATION THE CITY DPW WILL EXCAVATE SEDIMENT FROM THE UPSTREAM DAM FACE OF BAYS F-8 TO F-1 AS DESCRIBED IN STEP 12 ABOVE. THIS WORK WILL PROGRESS TO THE ABUTMENT SHORELINE AND INCLUDE REMOVAL OF THE STONE WORKING PAD. WORKING PAD REMOVAL WILL HAPPEN IN THE DRY. NO PERMANENT FILLING OF THE CREEK WILL REMAIN. AN ESTIMATED TOTAL OF 200 TO 300 CY OF SEDIMENT WILL BE REMOVED AS PART OF THE IDA LAKE LOWERING.
- 18. THE TOTAL AREA OF DISTURBANCE FOR THIS WORK WILL BE 0.29 ACRES.



PROJECT PLAN



PROJECT PLAN

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