



STATE OF RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
BUREAU OF ENVIRONMENTAL PROTECTION
OFFICE OF COMPLIANCE AND INSPECTION
235 Promenade Street, Suite 220
Providence, RI 02908-5767

April 7, 2021

Julia A. Forgue, Utilities Director
City of Newport
43 Broadway
Newport, RI 02840

RE: *Final Executed Consent Agreement*

*File Nos.: Dam State I.D. Nos. 395, 396, 485, 580, 581, 582, 583, 584 and 585 and
OCI-DAMS-13-64, OCI-DAMS-13-65, OCI-DAMS-13-66, OCI-DAMS-
13-67, OCI-DAMS-13-68, OCI-DAMS-13-70, OCI-DAMS-13-72, OCI-
DAMS-13-73 and OCI-DAMS-13-74*

AAD No.: 16-001/DE

Julia

Dear Ms. ~~Forgue~~,

Enclosed please find an executed copy of the Consent Agreement and the attachments referenced in the Agreement. This Agreement resolves the Notice of Violation issued by the Department of Environmental Management (DEM) to the City of Newport on April 13, 2016.

Thank you for your cooperation in resolving this matter.

Sincerely,

David E. Chopy, Administrator
DEM Office of Compliance and Inspection

enc: Executed Consent Agreement
Attachment A - *ENC.*
Attachment B - *INSP. REPORT IN FILE*
Attachment C - *INSP. REPORT IN FILE*
Attachment D - *ENC.*
Attachment E - *ENC.*

cc: Mary Dalton, DEM Administrative Adjudication Division
Joseph LoBianco, DEM Office of Legal Services
Christopher J. Behan, Newport City Solicitor

**STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

OFFICE OF COMPLIANCE AND INSPECTION

In re: City of Newport

**File Nos.: Dam State I.D. 395, 396, 485, 580,
581, 582, 583, 584 and 585
AAD No.: 16-001/DE**

CONSENT AGREEMENT

A. INTENT & PURPOSE

This Agreement is entered by and between the Rhode Island Department of Environmental Management (“RIDEM”) and the City of Newport, Rhode Island (“Respondent”). This Agreement is entered in accordance with Section 42-17.1-2 et seq. of the Rhode Island General Laws (“R.I. Gen. Laws”) for the purpose of resolving the alleged violations set forth in a Notice of Violation (“NOV”) issued to Respondent by RIDEM on April 13, 2016.

B. STIPULATED FACTS

(1) WHEREAS, the properties are as follows:

- (a) A dam identified as Lawton Valley Reservoir Dam, State Identification Number 395, located approximately 3,000 feet north of the intersection of West Main Road and Union Street, approximately 650 feet east of West Main Road, in the Town of Portsmouth, Rhode Island (“Dam 395”).
- (b) A dam identified as Nonquit Pond Dam, State Identification Number 396, located approximately 800 feet west of the intersection of Main Road and Pond Bridge Road, approximately 70 feet north of Pond Bridge Road, in the Town of Tiverton, Rhode Island (“Dam 396”).
- (c) A dam identified as Harold E. Watson Reservoir Dam, State Identification Number 485, located approximately 5,700 feet north of the intersection of Peckham Road and West Main Road, approximately 2,300 feet east of West Main Road, in the Town of Tiverton, Rhode Island (“Dam 485”).
- (d) A dam identified as Sisson Pond Dam, State Identification Number 580, located approximately 1,500 feet east of the intersection of Union Street and Jepson Lane, approximately 1,300 feet south of Union Street, in the Town of Portsmouth, Rhode Island (“Dam 580”).

- (e) A dam identified as St. Mary's Pond Dam, State Identification Number 581, located approximately 4,000 feet east of the intersection of West Main Road and Union Street, approximately 1,300 feet south of Union Street, in the Town of Portsmouth, Rhode Island ("Dam 581").
- (f) A dam identified as Nelson Pond Dam, State Identification Number 582, located approximately 1,200 feet northwest of the intersection of Paradise Avenue and Hanging Rock Road, approximately 550 feet east of Paradise Avenue, in the Town of Middletown, Rhode Island ("Dam 582").
- (g) A dam identified as Gardiner Pond Dam, State Identification Number 583, located immediately northeast of the intersection of Hanging Rock Road and Sachuest Point Road, approximately 160 feet east of Hanging Rock Road, in the Town of Middletown, Rhode Island ("Dam 583").
- (h) A dam identified as Easton Pond North Dam, State Identification Number 584, located at the intersection of Valley Road and Aquidneck Avenue, approximately 270 feet west of Aquidneck Avenue, in the Town of Middletown, Rhode Island ("Dam 584").
- (i) A dam identified as Easton Pond South Dam, State Identification Number 585, located approximately 1,300 feet west of the intersection of Aquidneck Road and Memorial Boulevard, approximately 100 feet north of Memorial Boulevard, on the line between the Town of Middletown and the City of Newport, Rhode Island ("Dam 585").

Collectively, the nine dams are referred to as the "Dams".

- (2) WHEREAS, Respondent owns the Dams.
- (3) WHEREAS, on April 13, 2016, RIDEM issued a NOV to Respondent alleging certain violations of the *Rules and Regulations for Dam Safety* at the Dams (the "Dam Safety Rules")
- (4) WHEREAS, Respondent requested an administrative hearing to contest the NOV.
- (5) WHEREAS, Respondent fully complied with the Order section of the NOV for Dam 395, Dam 485, Dam 580 and Dam 581.
- (6) WHEREAS, Respondent has partially complied with the Order section of the NOV for Dam 396, Dam 582, Dam 583, Dam 584 and Dam 585.
- (7) WHEREAS, the Administrative Adjudication Division is a division of RIDEM.
- (8) WHEREAS, in a letter dated June 5, 2018, RIDEM approved Respondent's request to construct a permanent access way along a portion of the downstream toe of Dam 582 (the "Permanent Access Way") to allow vegetation removal from the adjacent downstream side of the dam (the "Approval"). A copy of the letter is attached hereto and incorporated herein as Attachment A.

- (9) WHEREAS, on November 7, 2019, RIDEM received a visual inspection report for Dam 584 that was prepared by Pare Corporation on behalf of Respondent (the "Dam 584 Report"). The report is attached hereto and incorporated herein as Attachment B.
- (10) WHEREAS, on November 7, 2019, RIDEM received a visual inspection report for Dam 585 that was prepared by Pare Corporation on behalf of Respondent (the "Dam 585 Report"). The report is attached hereto and incorporated herein as Attachment C.
- (11) WHEREAS, on March 3, 2021, RIDEM received a letter from Respondent that described proposed work to remove the vegetation around Dam 583 (the "Dam 583 Vegetation Removal Project"). The letter is attached hereto and incorporated herein as Attachment D.
- (12) WHEREAS, on March 17, 2021, Respondent applied to RIDEM to repair the low-level outlet for Dam 396 (the "Dam 396 Repair Application"). The application is attached hereto and incorporated herein as Attachment E.
- (13) WHEREAS, on March 17, 2021, RIDEM sent electronic correspondence to Respondent stating that no permit was required from RIDEM for the Dam 583 Vegetation Removal Project; however, a permit may be required from the Coastal Resources Management Council.
- (14) WHEREAS, in order to effect a timely and amicable resolution of the NOV, RIDEM and Respondent hereby agree that it is in the best interest of the parties and in the public interest to resolve the issues raised in the NOV.
- (15) WHEREAS, RIDEM finds that this Agreement is a reasonable and fair settlement and adequately protects the public interest in accordance with the Dam Safety Rules.

C. AGREEMENT

- (1) JURISDICTION – RIDEM has jurisdiction over the subject matter of this Agreement and has personal jurisdiction over Respondent.
- (2) FORCE and EFFECT – This Agreement shall have the full force and effect of a final compliance order issued after a full hearing on the merits pursuant to the Administrative Procedures Act, R.I. Gen. Laws Section 42-35-1 et seq. and R.I. Gen. Laws Section 42-17.7-1 et seq. from which no timely appeal was taken, and which is enforceable in Superior Court in accordance with R.I. Gen. Laws Section 42-17.1-2(21)(vi).
- (3) APPLICATION – The provisions of this Agreement shall apply to and be binding upon RIDEM, Respondent and its agents, servants, employees, successors, assigns and all persons, firms and corporations acting under, through and for Respondent in the performance of work relating to or impacting the requirements of this Agreement.

- (4) CONDITIONS – Respondent shall complete the following actions to comply with the Order section of the NOV. A Qualified Engineer, as referenced below, is defined in Part 1.5(A) of the Dam Safety Rules:
- (a) Dam 396 – **Within 60 days of RIDEM’s approval of the Dam 396 Repair Application**, begin the work and complete the work in accordance with the approved schedule, as evidenced by the submission of a written certification to RIDEM from a Qualified Engineer that the work is complete;
 - (b) Dam 582
 - (i) **By May 31, 2021**, Respondent’s engineer responsible for the design of the Permanent Access Way shall submit to RIDEM a written certification that the work is complete in accordance with the Approval;
 - (ii) **By June 30, 2021**, remove vegetation that does not allow a proper visual inspection to be performed from the areas of the downstream slope of the dam adjacent to the Permanent Access Way and submit to RIDEM a visual inspection report of those areas that is prepared by a Qualified Engineer; and
 - (iii) **By October 31, 2021**, a Qualified Engineer shall submit to RIDEM a detailed investigation report of the auxiliary spillway in accordance with the Dam Safety Rules;
 - (c) Dam 583 – **By December 31, 2021**, complete the work for the Dam 583 Vegetation Removal Project and submit to RIDEM a visual inspection report of the dam that is prepared by a Qualified Engineer;
 - (d) Dam 584
 - (i) **By August 31, 2021**, submit to RIDEM an application to repair the auxiliary spillway that is prepared by a Qualified Engineer in accordance with Part 1.10(B) of the Dam Safety Rules. The application shall include a schedule to complete the work;
 - (ii) **Within 60 days of RIDEM’s approval of the application**, issue a Notice of intent to Proceed and complete the work in accordance with the approved schedule, as evidenced by the submission of a written certification to RIDEM from a Qualified Engineer that the work is complete;
 - (iii) **By May 31, 2023**, remove vegetation from those areas of the dam that do not allow a proper visual inspection to be performed from the downstream slope between station 4+00 and station 10+00 as shown on Figure 3 of the Dam 584 Report and submit to RIDEM a visual inspection report of those areas of the dam that is prepared by a Qualified Engineer; and
 - (iv) **By May 31, 2023**, submit to RIDEM a detailed investigation report of the spillway that is prepared by a Qualified Engineer;

- (e) Dam 585
- (i) **By June 30, 2021**, submit to RIDEM a visual inspection report of the areas of the upstream side and downstream side of the embankment of the dam that could not be properly inspected as cited in the NOV; and
 - (ii) **By June 30, 2021**, repair the erosion to the upstream side and crest of the embankment of the dam at station 7+50 as shown on Figure 3 of the Dam 585 Report, as evidenced by the submission of a written certification to RIDEM from a Qualified Engineer that the work is complete;
- (f) The visual inspection reports and detailed investigation reports must specify any actions necessary to return the dams to a safe condition and include a schedule to complete the work. For any proposed repairs, the reports must include an application prepared by a Qualified Engineer in accordance with Part 1.10(B) of the Dam Safety Rules; and
- (g) The reports, applications, plans and schedules required above shall be subject to RIDEM's review and approval. Upon review, RIDEM shall provide written notification to Respondent either granting formal approval or stating the deficiencies therein. Within 30 days (unless a longer time is specified) of receiving a notification of deficiencies, Respondent shall submit to RIDEM a modified report, application, and/or schedule or additional information necessary to correct the deficiencies.

D. COMPLIANCE

- (1) EFFECT OF COMPLIANCE – Compliance with and fulfillment of this Agreement shall be deemed to resolve all issues raised in the NOV.
- (2) FAILURE TO COMPLY – If Respondent fails to comply with items specified in subsection C(4) of the Agreement, Respondent shall pay a stipulated penalty of \$500 per month for each and every month during which the noncompliance continues, except that RIDEM may, for good cause shown, defer or reduce such penalty. The payment of a penalty in accordance with this section shall not preclude RIDEM from seeking any other appropriate remedy (e.g., injunctive relief in Superior Court).
- (3) COMPLIANCE WITH OTHER APPLICABLE LAWS – Compliance with the terms of this Agreement does not relieve Respondent of any obligation to comply with any other applicable laws or regulations administered by, through or for RIDEM or any other governmental entity.

- (4) ADDITIONAL ENFORCEMENT ACTIONS – Upon a determination by the Director that there is a threat to the public health or the environment, or upon discovery of any new information, RIDEM reserves the right to take additional enforcement actions as provided by statute or regulation, including, but not limited to, the issuance of “Immediate Compliance Orders” as authorized by R.I. Gen. Laws Section 42-17.1-2(21). This Agreement shall not restrict any right to hearing or other right available by statute or regulation that Respondent may have regarding any new enforcement action commenced by RIDEM after the execution of this Agreement.
- (5) FUTURE ACTIVITIES AND UNKNOWN CONDITIONS – This Agreement shall not operate to shield Respondent from liability arising from future activities, as of the date of execution of this Agreement.
- (6) SCOPE OF THE AGREEMENT – The scope of the Agreement is limited to violations alleged in the NOV.
- (7) NOTICE AND COMMUNICATION – Communications regarding this Agreement shall be directed to:

David E. Chopy, Administrator
RIDEM Office of Compliance and Inspection
235 Promenade Street
Providence, RI 02908-5767
(401) 222-1360 ext. 77400
david.chopy@dem.ri.gov

Joseph J. LoBianco, Senior Legal Counsel
RIDEM Office of Legal Services
235 Promenade Street
Providence, RI 02908-5767
(401) 222-6607 ext. 72302
joseph.lobianco@dem.ri.gov

Julia A. Forgue, Utilities Director
City of Newport
43 Broadway
Newport, RI 02840
(401) 845-5600
jforgue@cityofnewport.com

Christopher J. Behan, City Solicitor
City of Newport
43 Broadway
Newport, RI 02840
(401) 845-5423
cbehan@cityofnewport.com

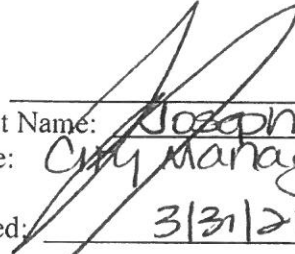
All communications regarding compliance with this Agreement shall be forwarded to the above-referenced addressees by certified mail.

- (8) DEFERRAL – The Director may, for good cause shown, defer any of the compliance dates prescribed herein. Good cause for deferral of any compliance date shall be forwarded to RIDEM in writing at least 15 days prior to the prescribed deadline.
- (9) AMENDMENT – The Agreement may be amended by agreement of the parties in writing.
- (10) EFFECTIVE DATE – This Agreement shall be deemed entered as of the date of execution by all parties.

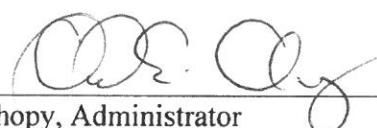
[SIGNATURES ON FOLLOWING PAGE]

IN WITNESS WHEREOF, the undersigned consent to this Agreement in substance and in form.

City of Newport

By: 
Print Name: Joseph J. Nicholson, Jr.
Title: City Manager
Dated: 3/31/21

State of Rhode Island, Department of Environmental Management

By: 
David E. Chopy, Administrator
Office of Compliance and Inspection

Dated: 4/4/21



RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Office of Compliance and Inspection 235 Promenade Street, Providence, RI 02908-5767
Telephone 401-222-1360 Fax 401-222-3811 TDD 401-222-4462

June 5, 2018

ATTACHMENT A

Robert C. Schultz, Jr., PE, PLS
Deputy Utilities Director -Engineering
City of Newport
70 Halsey Street
Newport, RI 02840-1332

Re: Repairs to Nelson (Paradise) Pond Dam (State ID #582)
Middletown, Rhode Island

Dear Mr. Schultz:

The Department of Environmental Management's (DEM) Office of Compliance and Inspection has received the following submittals from the City of Newport, Department of Utilities, pertaining to repair of the above-referenced Nelson (Paradise) Pond Dam:

- Letter to DEM dated April 24, 2018, which provide a repair application; and
- Letter to DEM dated May 24, 2018, which provided additional information and plans (3 sheets) for the proposed repair.

The proposed repair work includes installation of a 15 foot wide, permanent access way along the downstream toe of the dam and vegetation removal.

The repair work to Nelson Pond Dam is approved under the following conditions:

1. This approval is specifically limited to the repair work detailed in the submittals to DEM as described above. Major changes or revisions to the work are not authorized without prior approval from DEM;
2. The water level in Gardiner's Pond shall not be altered in order to complete the work;
3. Any material utilized in this project must be clean and free of matter that could pollute any water of the State including freshwater wetlands;
4. Best management practices for erosion and sediment controls shall be used as needed. Temporary controls to prevent soil from eroding off of the site into the adjacent pond or stream shall be installed prior to commencing the maintenance. All controls must be maintained in effective operating condition during the work, and all exposed soil and other fills must be permanently stabilized at the earliest possible date following completion of the work. Following stabilization of the work area, all temporary soil erosion controls such as silt fencing must be removed (For guidance see *Rhode Island Soil Erosion and Sediment Control Handbook* and *Rhode Island Stormwater Design and Installation Standards Manual*.);

5. All repair work shall be protective of water quality and freshwater wetland functions and values so as to prevent pollutants, sediment, direct discharge of stormwater runoff, or any material foreign to waters of the State including freshwater wetlands, or hazardous to life, from entering any waters of the State including freshwater wetlands;
6. During the repair work, the engineer responsible for the design shall maintain sufficient oversight of the project to be able to certify, upon completion of the work, that it was completed in conformance with the documents approved herein; and
7. Upon completion of the repair work and only if there was any significant change from the approved plans, a set of as-built plans shall be provided to DEM for our file.

This approval also constitutes your authorization from the U.S. Army Corps of Engineers (Corps) under Section 404 of the Clean Water Act for the work proposed. Your project qualifies as a Category 1 activity under the Rhode Island General Permit (General Permit No. NAE-2011-2402) (RI GP). You can view this permit at <http://www.nae.usace.army.mil/Portals/74/docs/regulatory/StateGeneralPermits/RIGP.pdf>. You are, therefore, not required to file a separate application with the Corps.

Please note that the General Conditions within the RI GP apply to all activities authorized under the RI GP. Please review them carefully to thoroughly familiarize yourself with their contents. You may wish to discuss all permit conditions with your contractor to ensure that the work can be accomplished in a manner which conforms to all requirements.

You are required to comply with the terms and conditions of this permit and to carry out this project in compliance with the Dam Safety Regulations at all times. Failure to do so may result in an enforcement action by DEM and/or subject you to the enforcement provisions of the Corps' regulations.

A copy of the stamped-approved plans is attached.

Please contact me at (401) 222-1360, extension 7122 or email at paul.guglielmino@dem.ri.gov upon initiation and completion of the project, or if you have any questions on this matter.

Sincerely,



Paul W. Guglielmino
Principal Civil Engineer
Dam Safety Program
Office of Compliance & Inspection

Enc.: Approved plans

Cc (via email, w/out Enc.):

David Chopy, DEM Office of Compliance & Inspection
Bruce Ahearn, DEM Office of Compliance & Inspection
Joseph J. LoBianco, Esq., DEM Office of Legal Services
Peter T. Gaynor, Executive Director, Emergency Management Agency
Samantha Richer, Emergency Management Agency
Chief Ronald Doire, Director, Middletown Emergency Management

583



THE CITY OF NEWPORT, RHODE ISLAND - AMERICA'S FIRST RESORT
DEPARTMENT OF UTILITIES

March 3, 2021

ATTACHMENT D

Julia A. Forgue, PE
Director

RIDEM OC&I Dam Safet;
235 Promenade Street
Providence, RI 02908-5767



RE: State Dam ID #583 - Gardiner Pond Dam
Long Term Vegetation Control

Dear Mr. Chopy,

The City of Newport, Department of Utilities, Water Division (Department) continues to address the outstanding issues from the Rhode Island Department of Environmental Management, Office of Compliance & Inspection's ("OCI") NOV. For Dam 583 vegetation on the upstream side, crest and downstream side of the embankment did not allow for proper inspection. The majority of this vegetation is phragmites. The Department intends to complete Long Term Vegetation Control. Without this control, vegetation would reestablish and violation return in next inspection cycle. Please find the information herein as the Department's Application for long term vegetation control via mechanical removal, mulching, and herbicide treatment of the area outlined in yellow.



Year One: March - April 2021 complete cutting of all phragmites via MarshMaster (Amphibious Marsh Buggy) allowing for inspection by the Department. This cutting will eliminate deadwood from being mixed in with the live plants for Fall 2021 cutting and herbicide treatment.

Year Two: If Fall 2021 treatment is successful, Spring 2022 should result in 75% or more of the Phragmites being eliminated. If unsuccessful entire area will be cut and retreated. Assumed successful treatment, results in select cutting of Phragmites areas and foliar herbicide application. Foliar application allows for beneficial native plants mixed in be left intact.

Year Three: Select cutting of Phragmites areas and associated foliar herbicide application. Following the above program, the Department will spot treat as required in accordance with the Annual Aquatic Vegetation Control Permits.

After the three year program ongoing monitoring will be completed to address phragmites before they spread. The area directly abuts Sachuest Point National Wildlife Refuge (NWR) marsh restoration area. However, unlike the previous restoration work, channels and other areas on the Department's property have not been silted in and do not require restoration. From the result of the Sachuest Salt Marsh restoration and similar projects throughout the coastal United States, it is expected that the marsh flora and fauna will both respond strongly to the restoration by becoming more like the biological communities present in unimpacted marshes.

NWD appreciates your continued assistance with NWD's NOV. Currently no immediate maintenance repairs are necessary to address an existing emergency situation. Required maintenance repairs exist as detailed above and will be implemented as soon as reasonably possible. All work will be completed in accordance with Rules and Regulations for Dam Safety (250-RICR-130-05-1) and NWD's IO&M. If you have any questions or concerns please contact me.

Respectfully,



Robert C. Schultz, Jr., PE, PLS
Deputy Utilities Director-Engineering

cc: Julia A. Fogue, Director of Utilities
Christopher J. Behan, City Solicitor
Joseph Roque, Supervisor Water Distribution and Collection



THE CITY OF NEWPORT, RHODE ISLAND - AMERICA'S FIRST RESORT
DEPARTMENT OF UTILITIES

March 17, 2021

ATTACHMENT E

Julia A. Forgue, PE
Director

RIDEM OC&I Dam Safety
235 Promenade Street
Providence, RI 02908-5767

RE: State Dam ID #396 - Nonquit Pond Dam Emergency Repair

Dear Mr. Chopy,

The City of Newport Department of Utilities, Water Division (NWD) engaged PARE Engineering to complete a detailed inspection of the Dynamic Model 11 Series A Slide Gate low level outlet for Nonquit Pond Dam. PARE engaged Cavanagh Marine, Inc. to complete the underwater dive inspection. The December 2020 inspection identified that the Dynamic Model 11 Series A Slide Gate was segmented with failed mechanical anchors, seal issues and mastic gasket failure. These conditions render the low-level outlet inoperable, leaking by and represent an unacceptable level of failure.

NWD has engaged Cavanagh Marine, Inc. to complete an emergency installation of an 900 Series Stainless Steel Gate as manufactured by Whipps, Inc. Gate will be installed by commercial divers on the impoundment side, eliminating the need for coffer dam, minimizing environmental impacts and allowing for fast resolution of the unsafe condition as shown on the attached plans.

The Whipps gate is currently being manufactured and will be installed on delivery. It is projected that dive installation will take up to two weeks. During the installation oversight will be provided by NWD with potential support from PARE. Supervision will be sufficient to certify, upon completion of the work, that said work was completed in conformance with specifications and approvals as applicable.

NWD appreciates your continued assistance with NWD's NOV. If you have any questions or concerns please contact me.

Respectfully,


Robert C. Schultz, Jr., PE, PLS
Deputy Utilities Director-Engineering

cc: Julia A. Forgue, Director of Utilities

GENERAL NOTES FOR POST-INSTALLED ANCHORS

1) EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES AS PROVIDED BY HILTI, INC. CONTACT HILTI AT (800) 879-8000 FOR PRODUCT RELATED QUESTIONS.

- a) ANCHORAGE TO CONCRETE:
- 1) ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - (1) HILTI HIT-RE 500V3 SAFE SET SYSTEM WITH HILTI HIT-Z ROD PER ICC ESR-3187
 - (2) HILTI HIT-HY 200 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) AND VC 150/200 VACUUM (VC 20/40) SYSTEM WITH HAS-E THREADED ROD PER ICC ESR-3187
 - (3) HILTI HIT-RE 500V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT (TE-CD OR TE-YD) AND VC 150/200 VACUUM (VC 20/40) SYSTEM WITH HAS-E THREADED ROD PER ICC ESR-3814
 - (4) HILTI HIT-RE 500V3 SAFE SET SYSTEM WITH HILTI ROUGHENING TOOL (TE-VRT) WITH HAS-E THREADED ROD PER ICC ESR-3814 FOR DIAMOND CORED HOLES

- 2) MEDIUM DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - (1) HILTI KWIK HUS-EZ, KWIK HUS-EZ P, AND KWIK HUS-EZ E SCREW ANCHORS PER ICC ESR-3027
 - (2) HILTI KWIK BOLT-TZ EXPANSION ANCHORS PER ICC ESR-1917
 - (3) HILTI KWIK BOLT-TZ EXPANSION ANCHORS DIAMETERS 3/8", 1/2" AND 5/8" WITH HILTI ADAPTIVE TORQUE SYSTEM (SW-MAT-A32 Impact Wrench Tool body and S-MAT-A32 Adaptive Torque Module) PER ICC ESR-2302
 - (4) HILTI KWIK BOLT-TZ EXPANSION ANCHORS (UNCRACKED CONCRETE ONLY) PER ICC ESR-2302
 - (5) HILTI KWIK BOLT-TZ EXPANSION ANCHORS DIAMETERS 3/8", 1/2" AND 5/8" WITH HILTI ADAPTIVE TORQUE SYSTEM (SW-MAT-A32 Impact Wrench Tool body and S-MAT-A32 Adaptive Torque Module) (UNCRACKED CONCRETE ONLY) PER ICC ESR-2302

- 3) HEAVY DUTY MECHANICAL ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - (1) HILTI HDK UNDERCUT ANCHORS PER ICC ESR-1544
 - (2) HILTI HSL-3 EXPANSION ANCHORS PER ICC ESR 1545

b) REBAR DOWELING INTO CONCRETE:

- 1) ADHESIVE ANCHORS FOR CRACKED AND UNCRACKED CONCRETE USE:
 - (1) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4143, CONTINUOUSLY DEFORMED STEEL REBAR
 - (2) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4144, CONTINUOUSLY DEFORMED STEEL REBAR

2) MECHANICAL ANCHORS USE:

- (1) HILTI KWIK BOLT-TZ EXPANSION ANCHORS PER ICC ESR 1918

3) ANCHORAGE TO MASONRY:

- 1) ADHESIVE ANCHORS USE:
 - (1) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4143, CONTINUOUSLY DEFORMED STEEL REBAR
 - (2) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4144, CONTINUOUSLY DEFORMED STEEL REBAR

2) MECHANICAL ANCHORS USE:

- (1) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4144, CONTINUOUSLY DEFORMED STEEL REBAR
- (2) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4144, CONTINUOUSLY DEFORMED STEEL REBAR
- (3) THE APPROPRIATE SIZE GREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S RECOMMENDATION

3) ANCHORAGE TO FOLLOW / MULTI-WHITE MASONRY:

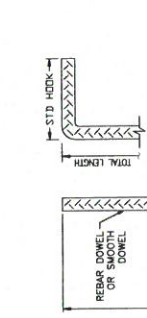
- (1) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4144, CONTINUOUSLY DEFORMED STEEL REBAR
- (2) HILTI HIT-HY 270 MASONRY ADHESIVE ANCHORING SYSTEM PER ICC ESR-4144, CONTINUOUSLY DEFORMED STEEL REBAR

4) OVERHEAD ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.

5) THE CONTRACTOR SHALL ARRANGE AN ANCHOR MANUFACTURER'S REPRESENTATIVE TO PROVIDE ON-SITE INSTALLATION TRAINING FOR ALL OF THEIR ANCHORING PRODUCTS SPECIFIED. THE STRUCTURAL ENGINEER OF RECORD MUST RECEIVE DOCUMENTED CONFIRMATION FROM ALL CONTRACTOR PERSONNEL WHO INSTALL ANCHORS PRIOR TO THE COMPLETION OF INSTALLING ANCHORS.

6) ANCHOR CAPACITY IS DEPENDANT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO WALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.

7) FASTENING DIMENSIONS BASED IN THE CONCRETE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED ON THE DRAWINGS THAT THE BARS CAN BE CUT, THE CONTRACTOR SHALL REVIEW THE EXISTING STRUCTURAL DRAWINGS AND SHALL UNDERTAKE TO LOCATE THE POSITION OF THE ANCHORS TO BE INSTALLED AND SHALL REPORT THE RESULTS TO THE ARCHITECT AND STRUCTURAL ENGINEER. 100% Q.P.R. A-BAY, CHIPPING OR OTHER APPROVED MEANS.



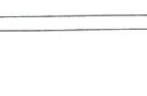
HILTI-HIS-N
(SEE SCHEDULE)



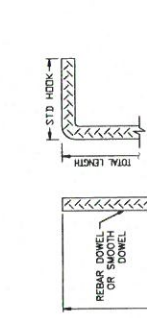
HILTI-HIS-V ROD
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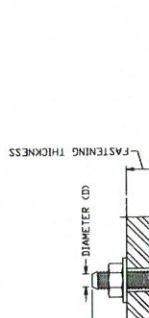
HILTI-HIT-Z ROD
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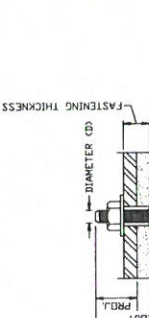
HILTI-HIT-W/HIT-SC
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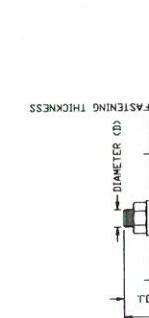
DOWEL BAR
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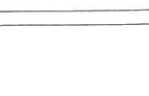
HILTI-HIT-Y ROD
(SEE SCHEDULE)



HILTI-HIT-V ROD
(SEE SCHEDULE)



HILTI-HIT-Z ROD
(SEE SCHEDULE)



HILTI-HIT-W/HIT-SC
(SEE SCHEDULE)

CONTRACT NO.	DWG NO.	REV.	SCALE

DWG NO.	DWG TITLE	DATE	SCALE

NO.	REVISION	BY	CHK	APP	DATE

NO.	REFERENCE DRAWINGS

Whipps 924 Series Stainless Steel Gate Specifications

General:

1. Gate Assemblies:
 - a. Type: Self-contained, rising stem unless otherwise specified.
 - b. Leakage not to exceed AWWA C561-12 Standard during normal loading conditions. During usual loading conditions (seating head), shop tested leakage shall not exceed 0.025 gpm per foot of seal. Field leakage shall not exceed 0.05 gpm/ft of seal.
 - c. Unless otherwise specified, all stainless steel parts, including fasteners shall be type 304 stainless steel.
2. Actuators:
 - a. The gate system shall have an upward operating direction.
 - b. Operating effort shall not exceed 40 lbs. when opening or closing the gate at maximum head.
3. Dimensions
 - a. The gate shall be sized to avoid interference with the existing opening through the wall when fully opened. The gate shall be sized to avoid interference with any embedded steel remaining from the existing gate.

Frames:

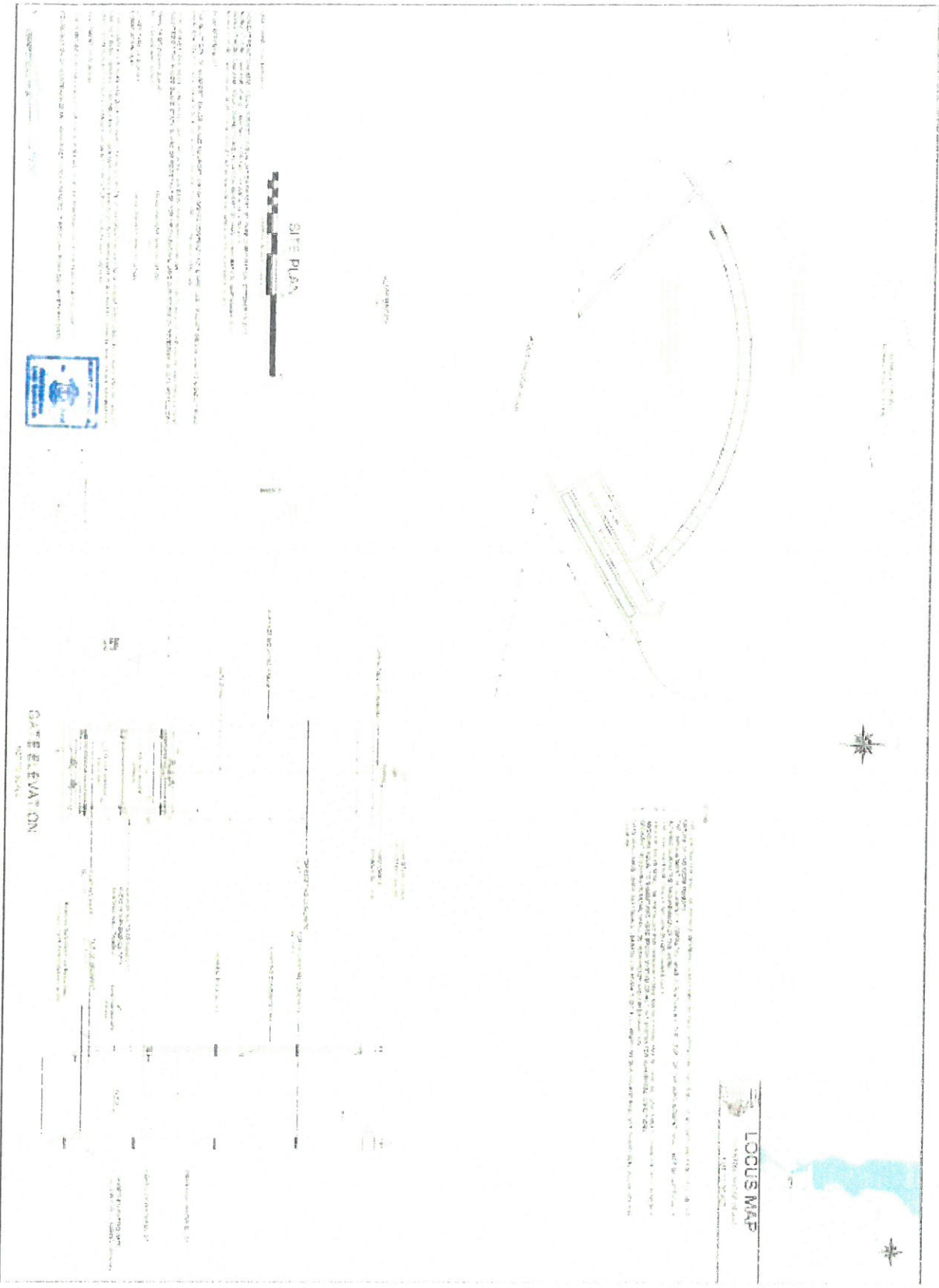
1. Formed stainless steel construction consisting of guides, an invert member and a top member where top closure is required. Suitable reinforcements will be provided to resist all operating loads.
 - a. Minimum material thickness shall be 1/4", frame shall be designed to accept minimum of 1/4" slide edge thickness, shear load transfer must be through the entire thickness of the slide edge and not skin plate alone.
2. Frames, which are attached with epoxy anchor bolts, shall be provided with bolts conforming with ICBO report 4285 regarding number of bolts, size, and placement.
3. Segmenting of frame shall be not be permitted.

Seals:

1. The frames shall be equipped with seats/seals to prevent metal-to-metal contact and restrict leakage. Use of rubber J or P-type seals shall not be permitted.
 - a. The guides of all gates shall incorporate ultra high molecular weight polyethylene (UHMW) seat/seals on both the upstream and downstream sides of the slide. Each seat/seal will be shaped to act as both a bearing surface and a seal. The top seal, where required on upward opening gates, shall be mounted on the frame and be of low friction polymer construction.
 - b. All upward opening gates shall contain a replaceable, flush bottom neoprene invert seal, mounted on the slide.
 - c. All seals shall be attached to the frame with stainless steel retainers and/or stainless steel bolts.

Slides:

- a. Gearboxes shall have a 1" minimum diameter stainless steel pinion shaft.
- b. Roller-type bearings shall be provided above and below the operating nut.
- c. Mechanical seals shall be provided on the top and bottom of the actuator housing and around the pinion shaft.
- d. All gears are to be steel or bronze.
- e. The crank shall be a handwheel and shall have a diameter of not less than 24". The crank shall be removable to allow for gate operation by an electric drill.
- f. The actuator shall be provided with a lockable security box to cover the operating shaft to prevent unauthorized operations. The security box shall be able to be secured to the pedestal/operator via a standard pad lock (pad lock to be furnished by the owner).



SITE PLAN

1. THE PROPOSED GATE SHALL BE CONSTRUCTED TO THE FOLLOWING SPECIFICATIONS:

2. THE GATE SHALL BE 10 FEET HIGH AND 10 FEET WIDE.

3. THE GATE SHALL BE MADE OF CONCRETE AND SHALL BE REINFORCED WITH STEEL.

4. THE GATE SHALL BE SET ON A FOUNDATION OF CONCRETE PILES.

5. THE GATE SHALL BE OPERATED BY A CRANE AND SHALL BE CAPABLE OF WITHSTANDING A WIND SPEED OF 75 MPH.

6. THE GATE SHALL BE MAINTAINED IN GOOD REPAIR AT ALL TIMES.

7. THE GATE SHALL BE PAINTED WITH AN ANTI-RUST PAINT.

8. THE GATE SHALL BE MARKED WITH A SIGN THAT READS "NONQUIT POND DAM GATE".

9. THE GATE SHALL BE INSULATED TO PREVENT FROST DAMAGE.

10. THE GATE SHALL BE DESIGNED TO WITHSTAND A SEISMIC EVENT OF MAGNITUDE 4.0.



THIS PROJECT HAS BEEN REVIEWED BY THE CITY ENGINEER AND FOUND TO BE IN ACCORDANCE WITH THE CITY ENGINEERING DEPARTMENT'S STANDARDS AND SPECIFICATIONS FOR THE DESIGN AND CONSTRUCTION OF DAMS AND GATES. THE CITY ENGINEER'S REVIEW IS LIMITED TO THE TECHNICAL ASPECTS OF THE PROJECT AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED HEREON. THE CITY ENGINEER'S REVIEW IS LIMITED TO THE INFORMATION PROVIDED AND DOES NOT CONSTITUTE A GUARANTEE OF THE ACCURACY OR COMPLETENESS OF THE INFORMATION PROVIDED.

DESIGNED BY: [Logo]
 SCALE: 1" = 10'
 SHEET # 1 OF 1

EMERGENCY REPAIR
 PERMITTING PLAN LOW LEVEL GATE
 NONQUIT POND DAM
 BOND BRIDGE ROAD
 LIVERMONT RHODE ISLAND



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 DEPARTMENT OF UTILITIES
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