PUBLIC NOTICE



Comment Period Begins: April 18, 2023 Comment Period Ends: May 18, 2023 File Number: NAE-2023-00704

In Reply Refer To: Daniel Breen

Phone: (978) 318-8831 E-mail: Daniel.B.Breen@usace.army.mil

The District Engineer has received a permit application to conduct work in waters of the United States from the Town of Burrillville, Rhode Island, 200 Clear River Drive, Burrillville, Rhode Island 02858 (POC: Jeffrey McCormick, jmccormick@burrillville.org), through its agent, Pare Corporation, 10 Lincoln Road, Suite 210, Foxboro, Massachusetts 02035 (POC: David Matheson, dmatheson@parecorp.com). This work is proposed in Harrisville Pond and the Clear River near 0 East Avenue in Burrillville, Rhode Island 02858. The site coordinates are: Latitude 41.5757°N, Longitude -71.4030°W.

The project would rehabilitate the Harrisville Pond Dam, which impounds the Clear River, to maintain continued compliance with Rhode Island Department of Environmental Management (RIDEM) Dam Safety Regulations. The repairs would consist of the following components: reconstruction of the abandoned lowlevel outlet, including new intake structure, outlet conduit, and scour apron at the discharge point in the Clear River; replacement of the mid-level outlet 42-inch corrugated metal pipe (CMP) with a new 72-inch diameter concrete pipe; raising the height of the mid-level outlet perimeter walls to match the height of the embankment crest; reconstruction of portions of the upstream and downstream stone and concrete walls as needed for the mid-level and low-level outlet reconstruction; reconstruction of portions of the primary spillway discharge channel right wall as needed for the low-level outlet and mid-level outlet discharge penetration construction; installation of a sheetpile cutoff wall upstream of the existing upstream granite block wall along the right dam embankment; removal of soft sediments and installation of an armored upstream slope right of the primary spillway to add stability to the upstream granite block wall; rebuilding of the cap of the upstream wall right of the primary spillway; re-chinking and re-pointing areas of the primary spillway channel walls, training walls, and approach walls; resetting/supplementing granite blocks that have fallen into the Clear River and supplementing armor stone riprap along the downstream left bank of the river; regrading the downstream slope of the right embankment; and installation of anchor stones and supplemental riprap along the upstream slope of the left dam embankment. Within waters of the U.S. subject to USACE regulatory authority, there would be a discharge of 521.5 cubic yards of riprap, 4.1 cubic yards of a steel cutoff wall, and 358 cubic yards of granular backfill, as well as a temporary cofferdam installed during construction, within 0.13 acre of Harrisville Pond and 0.03 acre of the Clear River.

The work is shown on the enclosed plans entitled "Town of Burrillville Department of Public Works, Harrisville Pond Dam Rehabilitation, Burrillville, Rhode Island," on 15 sheets and dated March 23, 2023.

The applicant does not propose any compensatory mitigation because there would be no permanent loss of wetlands or other waters of the U.S. During construction, measures to avoid and minimize impacts to waters of the U.S. would include temporary installation of cofferdams and a turbidity barrier; the staging of construction adjacent to existing structures where the impoundment and river's edge are defined by manmade walls and

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ATITIODITY

armored slopes; and avoidance of impacts to vegetated areas to the extent practicable.

AUTHORITY				
Permi	Permits are required pursuant to:			
	Section 10 of the Rivers and Harbors Act of 1899			
X	Section 404 of the Clean Water Act			
	Section 103 of the Marine Protection, Research and Sanctuaries Act.			
	Section 14 of the Rivers and Harbors Act of 1899 (33 USC 408)			

The decision whether to issue a permit will be based on an evaluation of the probable impact of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which may reasonably accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are: conservation, economics, aesthetics, general environmental concerns, wetlands, cultural value, fish and wildlife values, flood hazards, flood plain value, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food production and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers, New England District (USACE), is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. The USACE will consider all comments received to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Where the activity involves the discharge of dredged or fill material into waters of the United States or the transportation of dredged material for the purpose of disposing it in ocean waters, the evaluation of the impact of the activity in the public interest will also include application of the guidelines promulgated by the Administrator, U.S Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act, and/or Section 103 of the Marine Protection Research and Sanctuaries Act of 1972, as amended.

NATIONAL HISTORIC PRESERVATION ACT

Based on his initial review, the District Engineer has determined that the proposed work may impact properties listed in, or eligible for listing in, the National Register of Historic Places. Additional review and consultation to fulfill requirements under Section 106 of the National Historic Preservation Act of 1966, as amended, will be ongoing as part of the permit review process.

ENDANGERED SPECIES CONSULTATION

The USACE is reviewing the application for the potential impact on Federally-listed threatened or endangered species and their designated critical habitat pursuant to section 7 of the Endangered Species Act as amended. Our review will be concluded prior to the final decision.

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OTHER GOVERNMENT AUTHORIZATIONS

The following authorizations have been applied for, or have been, or will be obtained:

- (X) Permit, license or assent from State.
- () Permit from local wetland agency or conservation commission.
- (X) Water Quality Certification in accordance with Section 401 of the Clean Water Act.

COMMENTS

In order to properly evaluate the proposal, we are seeking public comment. Anyone wishing to comment is encouraged to do so. Comments should be submitted in writing by the above date. If you have any questions, please contact Daniel Breen at (978) 318-8831, (800) 343-4789 or (800) 362-4367, if calling from within Massachusetts.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider the application. Requests for a public hearing shall specifically state the reasons for holding a public hearing. The USACE holds public hearings for the purpose of obtaining public comments when that is the best means for understanding a wide variety of concerns from a diverse segment of the public.

The initial determinations made herein will be reviewed in light of facts submitted in response to this notice. All comments will be considered a matter of public record. Copies of letters of objection will be forwarded to the applicant who will normally be requested to contact objectors directly in an effort to reach an understanding.

THIS NOTICE IS **NOT** AN AUTHORIZATION TO DO ANY WORK.

Kevin R Kotelly

Kevin R. Kotelly, P.E. Chief, Permits and Enforcement Branch Regulatory Division

If you would prefer not to continue receiving Public Notices by email, please contact Ms. Tina Chaisson at (978) 318-8058 or e-mail her at bettina.m.chaisson@usace.army.mil.

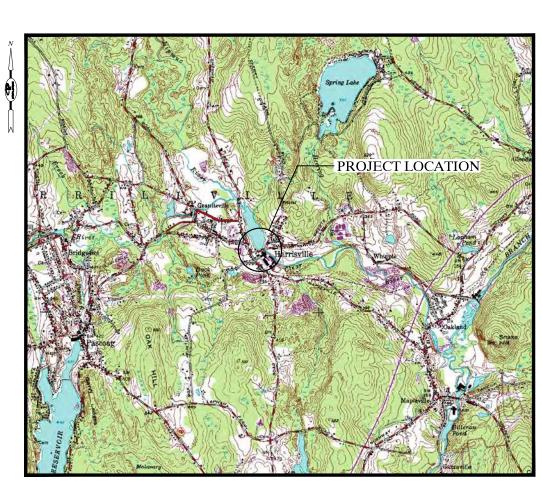
TOWN OF BURRILLVILLE DEPARTMENT OF PUBLIC WORKS HARRISVILLE POND DAM REHABILITATION

Prepared for The:

BURRILLVILLE, RHODE ISLAND

MARCH 2023

Drawing Index



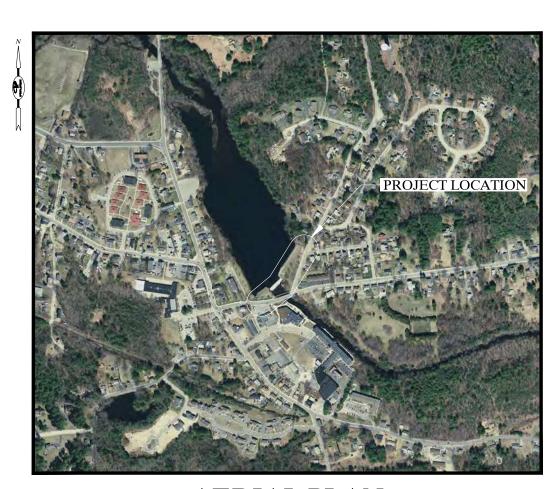
 $Locus_{\text{SCALE: }1"} \underset{= 4000'}{PLAN}$

- 0.0 COVER SHEET
- 1.0 GENERAL NOTES AND LEGEND
- 2.0 EXISTING CONDITIONS PLAN
- 2.1 EXISTING BATHYMETRY PLAN
- 2.2 EROSION CONTROL PLAN
- 3.0 PROPOSED SITE PLAN
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- 4.2 STRUCTURAL DETAILS 1
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- 5.0 UPSTREAM CUTOFF WALL PLAN AND SECTION
- 5.1 MID-LEVEL OUTLET PLAN
- 6.0 ADD/ALT 2-4: DOWNSTREAM CHANNEL AND SLOPE IMPROVEMENTS PLAN AND SECTIONS
- 7.0 MISCELLANEOUS DETAILS

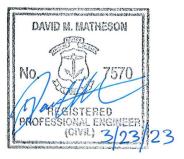
Prepared by:

PARE CORPORATION

Foxboro, Massachusetts



 $\underset{\text{SCALE: 1"}}{AERIAL}\underset{\text{800'}}{PLAN}$





GENERAL NOTES:

- TOWN OF BURRILLVILLE DEPARTMENT OF PUBLIC WORKS 200 CLEAR RIVER AVENUE
- OAKLAND, RI 02858 JEFFREY McCORMICK, DIRECTOR
- ENGINEER PARE CORPORATION
 10 LINCOLN ROAD, SUITE 210
- FOXBORO, MA 02035 DAVID MATHESON, P.E.
- ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE RHODE ISLAND STATE BUILDING CODE AND THE SPECIFICATIONS INCLUDED IN THIS CONTRACT. THESE PLANS ARE INCOMPLETE UNLESS ACCOMPANIED BY THE SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- THIS PLAN WAS DEVELOPED IN PART FROM THE MARCH 2009 SURVEY OF THE DAM COMPLETED BY WATERMAN ENGINEERING CO. AS WELL AS ADDITIONAL FIELD SURVEY COMPLETED BY PARE CORPORATION IN AUGUST OF 2020.
- THE VERTICAL DATUM OF THIS PLAN IS NAVD88. THE PLAN HAS BEEN APPROXIMATELY ALIGNED TO THE 2009 SURVEY PLAN, WHICH WAS OFFICIALLY ON NOV29. THE CONVERSION OF -0.79 FEET WAS USED TO CONVERT THE NOVD29 DATUM TO THE NAVD88 DATUM.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS. PLANS SHALL NOT BE SCALED FOR DIMENSIONS.
- 7. CONSTRUCTION SHALL BE MADE FROM APPROVED SHOP DRAWINGS ONLY.
- NOTES, TYPICAL DETAILS AND SCHEDULES APPLY TO ALL WORK UNLESS OTHERWISE NOTED. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS FOR REVIEW.
- INFORMATION REGARDING THE LOCATION OF SURROUNDING STRUCTURES, UTILITIES, AND THE CONFIGURATION AND CONDITION OF THE EXISTING DAM AND SPILLWAY AND OTHER APPURTENANT STRUCTURES, IS FURNISHED SOLELY FOR THE CONVENIENCE OF THE CONTRACTOR AND SHALL BE FIELD VERRIED. THE CONTRACTOR SHALL CONDUCT ITS OWN INDEPENDENT EXAMINATION OF SITE CONDITIONS FOR THE PURPOSE OF BIDDING, FABRICATION, AND CONSTRUCTION ASSOCIATED WITH THE PROJECT. ANY RELIANCE UPON INFORMATION MADE AVAILABLE BY THE OWNER OR THE ENGINEER SHALL BE AT THE CONTRACTOR'S RISK.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REGULATING FLOWS THROUGH AND/OR AROUND THE WORK AREA. THE CONTRACTOR SHALL COORDINATE REQUIRED DRAWDOWNS (DEPTHS AND DURATIONS) WITH GLOCESTER LAND TRUST.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL PROJECT DEMOLITION AND EXCESS MATERIAL IN ACCORDANCE WITH RHODE ISLAND, LOCAL, AND FEDERAL LAWS.
- 13. THE CONTRACTOR SHALL FOLLOW ALL OSHA AND OTHER APPLICABLE FEDERAL, STATE, AND LOCAL STANDARDS FOR ALL PROJECT COMPONENTS AND ACTIVITIES. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL SITE SAFETY PROCEDURES AND PRACTICES REGARDLESS OF THE PRESENCE OF THE OWNER OR ENGINEER.
- ALL CONSTRUCTION ACTIVITIES SHALL BE CONFINED TO THE LIMITS OF WORK AND TEMPORARY EASEMENTS DEFINED HEREIN.
- 15. WHERE REFERENCE IS MADE TO ANY STANDARD SPECIFICATION IT SHALL MEAN THE MOST RECENT SPECIFICATION. CODE, STANDARD, OR INTERIM SPECIFICATIONS OF THE ORGANIZATION REFERRED TO AND SHALL BE CONSIDERED A PART OF THESE CONTRACT DOCUMENTS TO THE EXTENT INDICATED. IN CASE OF CONFLICT, THE MORE RIGID REQUIREMENTS AND CODES SHALL GOVERN.
- 17. THE CONTRACTOR SHALL STAGE ALL EQUIPMENT IN THE DESIGNATED STAGING AREA. ALL GREASING AND REFUELING ACTIVITIES SHALL OCCUR IN THE STAGING AREA.
- 18. THE CONTRACTOR SHALL MAINTAIN A SECURE SITE AND PROVIDE APPROPRIATE SAFETY MEASURES TO PREVENT ACCIDENTS. ANTICIPATED SAFETY MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FENCES, ILASHING WARRING LIGHTS, AND POLICING IF NECESSARY. AT THE END OF EACH DAY OR WHEN PORTIONS OF THE SITE ARE NOT IN USE THE CONTRACTOR SHALL CLOSE AND LOCK ACCESS GATES TO THE SITE.
- 19. UPON COMPLETION OF THE PROJECT, CONTRACTOR IS TO PROVIDE TWO AS-BUILT PLAN SETS TO THE OWNER DEPICTING ANY FIELD CHANGES OF DIMENSION OR DETAIL, LOCATION OF UNDERGROUND STRUCTURES AND/OR UTILITIES, CONSTRUCTION DEVIATIONS, CHANGES DUE TO FIELD OR CHANGE ORDER, AND DETAILS NOT ON THE ORIGINAL DRAWNINGS.
- 20. NO WORK OR DISCHARGES, OTHER THAN THAT SHOWN, SHALL BE PERFORMED WITHIN WETLANDS WITHOUT FIRST RECEIVING PROPER PERMITS FROM THE REGULATORY AGENCIES. THE CONTRACTOR SHALL REMOVE, RESTORE, AND REPAIR ALL DAMAGE AS A RESULT OF UNAUTHORIZED WORK OR DISCHARGES TO WETLAND AREAS AT NO ADDITIONAL COST TO THE OWNER.
- 21. UPON COMPLETION OF THE WORK ALL DISTURBED AREAS SHALL BE DRESSED, SEEDED, AND MAINTAINED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. CONTRACTOR SHALL WADER SEEDED SLOPES ON A DAILY BASIS UNTIL A SATISFACTORY STAND OF GRASS HAS DEVELOPED
- THE CONTRACTOR SHALL ATTEND WEEKLY PROGRESS MEETINGS IN ACCORDANCE TO SPECIFICATION SECTION 01200; PROJECT MEETINGS.

TREE REMOVAL NOTES:

- CONTRACTOR SHALL CUT, REMOVE, GRUB ROOTS, AND DISPOSE OF ALL TREES AND STUMPS IDENTIFIED FOR REMOVAL
- ALL DISPOSAL SHALL BE PERFORMED IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS.

CONTROL OF WATER DIVERSION NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REGULATING BASE AND STORM FLOWS.
- 2. ANY NECESSARY COFFERDAMS AND DIVERSIONS SHALL BE DESIGNED BY THE CONTRACTOR AND BEAR THE STAMP OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF RHODE ISLAND. APPROVAL BY THE OWNER, ENGINEER, AND OFFICE OF DAM SAFETY IS REQUIRED PRIOR TO INSTALLATION. ALL DIVERSIONS SHALL BE INSTALLED AND REMOVED IN THEIR ENTIRETY AT NO ADDITIONAL COST TO THE OWNER. THE COFFERDAM, DIVERSION, AND CONTROL OF WATER PLAN SHALL BE DESIGNED TO ACCOMMODATE A 10-YEAR STORM EVENT.
- THE CONTRACTOR SHALL REGULATE DISCHARGES AND PHASE CONSTRUCTION SO THAT CONSTRUCTION EQUIPMENT DOES NOT PASS THROUGH FLOWING WATER.
- THE CONTRACTOR SHALL MAINTAIN A STOCKPILE OF MATERIAL ONSITE TO BE UTILIZED TO STABILIZE THE EXCAVATION IN THE EVENT OF HIGH WATER OR OTHER CONDITIONS WHICH MAY COMPROMISE THE COFFERDAM STABLITY. THE STOCKPILE SHALL BE MAINTAINED IN ACCORDANCE WITH A FLOOD EMERGENCY RESPONSE PLAN TO BE DEVELOPED BY THE CONTRACTOR AND SUBJECT TO APPROVAL BY THE RONINEER, OWNER, AND OFFICE OF DAM SAFETY.

EROSION AND SEDIMENT CONTROL NOTES:

- THE CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES FOR THE DURATION OF THE PROJECT.
- THE CONTRACTOR SHALL PREVENT SEDIMENT FROM ENTERING THE IMPOUNDMENT, DOWNSTREAM CHANNEL, OR RESOURCE AREAS.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN TURBIDITY BARRIERS AS INDICATED IN THE CONTRACT DOCUMENTS. TURBIDITY BARRIERS SHALL BE ANCHORED SECURETY AS NECESSARY TO ENSURE COLLECTION OF SEDIMENT AND EMBLE THE WORK TO BE PERFORMED.
- TURBIDITY BARRIERS SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF ANY WORK THAT COULD CREATE TURBIDITY.
- STOCKPILES SHALL BE A MINIMUM OF 1-FOOT FROM THE EDGE OF ANY SLOPE TO LIMIT RUNOFF DOWN THE EMBANKENT SLOPES. ALL STOCKPILES SHALL BE COVERED OR EROSION CONTROL. BARRIERS SHALL BE INSTALLED AROUND THE PERIMETER OF STOCKPILES TO PREVENT EROSION.
- 6. THE EROSION CONTROL BARRIERS SHALL CONSIST OF STRAW BALES BACKED BY SILT FENCE.
- EROSION CONTROL BARRIERS SHALL BE MODIFIED OR EXPANDED AS FIELD CONDITIONS WARRANT
- ALL EROSION CONTROL BARRIERS SHALL BE INSPECTED AT LEAST ONCE PER WEEK AND AFTER EACH STORM EVENT OF 0.5 INCH OR GREATER DURING CONSTRUCTION.
- 9. ANY DAMAGED AREAS SHALL BE REPAIRED WITHIN 24 HOURS OF DISCOVERY
- DEWATERING BASINS SHALL CONSIST OF STRAW BALE ENCLOSURES, TANKS, PERMEABLE BLADDERS, OR OTHER APPROVED METHOD. WASTE WASTERS SHALL BE PUMPED TO THE DEWATERING BASINS AND TREATED PRIOR TO DISCHARGE.
- 11. DISCHARGE OF TURBID WATER TO THE IMPOUNDMENT, DOWNSTREAM CHANNEL, OR ANY WETLAND SHALL BE PROHIBITED.

LOAM AND SEED NOTES:

- THE CONTRACTOR SHALL APPLY FERTILIZER AND LOAM TO PREPARED TOPSOIL SURFACE AT THE RATES INDICATED IN THE PROJECT SPECIFICATIONS AND AS OTHERWISE RECOMMENDED BY THE SOIL CHEMICAL ANALYSIS.
- 2. THE CONTRACTOR SHALL SEED ALL LOAMED AREA AND OTHER AREAS DISTURBED BY THE WORK AS INDICATED IN THE PROJECT SPECIFICATIONS.
- THE CONTRACTOR SHALL MULCH THE ENTIRE SEEDED AREA WITH STRAW MULCH AS INDICATED IN THE PROJECT SPECIFICATIONS.
- 4. THE CONTRACTOR SHALL INSTALL JUTE MESH OVER THE ENTIRE SEEDED AREA IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS FOR OVERLAPPING, ANCHORING, AND DIRECTION OF PLACEMENT, JUTE MESH INSTALLATION SHALL BE COMPLETED AS INDICATED IN THE PROJECT SPECIFICATIONS.
- 5. THE CONTRACTOR SHALL MAINTAIN SEEDED AREAS THROUGH ONE GROWING SEASON. MAINTENANCE INCLUDE MOWING, WATERING, AND RE-SEEDING AS REQUIRED TO DEVELOP A SATISFACTORY STAND OF GRASS AS DEFINED IN THE PROJECT SPECIFICATIONS (SECTION 02900: LANDSCAPING.)

CONCRETE NOTES

- CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACT 318-14 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, OR LATEST EDITION.
- STRUCTURAL CONCRETE SHALL BE OF NORMAL WEIGHT AGGREGATE WITH A COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- 3. CONCRETE SHALL BE AIR-ENTRAINED. PERCENTAGE OF ENTRAINED AIR SHALL BE 6%.
- 4. THE WATER CEMENT RATIO SHALL BE 0.40.
- 5. THE TRICALCIUM ALUMINATE (C3A) SHALL BE LESS THAN 4%.
- 6. THE CEMENT FOR THE SPILLWAY, SCOUR PAD AND INTAKE STRUCTURE SHALL CONFORM TO TYPE II PORTLAND CEMENT IN ACCORDANCE WITH ASTM C150.
- 8. DARATARD ADMIXTURE AS PRODUCED BY GRACE PRODUCTS, OR APPROVED EQUAL SHALL BE USED IN THE CONCRETE FOR THE SCOUR PAD AT AMOUNTS RECOMMENDED BY THE MANUFACTURER.
- 9. THE CONCRETE SLUMP SHALL NOT EXCEED 4 INCHES.
- 10. THE TOP SURFACE OF THE SCOUR PAD SHALL BE HAND FLOATED TO A SMOOTH FINISH
- 11. EXPOSED FACES OF THE TRAINING WALLS SHALL RECEIVE A RUBBED FINISH
- 12. PROVIDE A 3/4" CHAMFER ON ALL EXPOSED EDGES OF CONCRETE

REINFORCING STEEL NOTES:

- REINFORCING BARS SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 MANUAL OF STANDAR PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES AND THE RHODE ISLAND STATE BUILDING CODE.
- COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF THAT PORTION OF THE YORK. ALL ACCESSORIES MUST BE SHOWN ON THE SHOP DRAWINGEN.
- 3. REINFORCING BARS SHALL CONFORM TO ASTM A615 OR A706 (WELDABLE) GRADE 60.
- 5. UNLESS NOTED ON THE DRAWINGS, THE MINIMUM CONCRETE PROTECTION (CLEAR COVER) FOR CAST-IN-PLACE CONCRETE COVER SHALL BE AS FOLLOWS:
- A. FORMED CONCRETE EXPOSED TO EARTH OR WATER..... B. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH......3-INCHES
- MINIMUM REINFORCEMENT DEVELOPMENT LENGTH SHALL BE IN ACCORDANCE WITH ACI 318-14, SECTION 25.4.2.2, TABLE 25.4.2.2 AS MODIFIED IN TABLE 25.4.2.4, UNLESS NOTED ON THE

CONSTRUCTION SEQUENCE:

THE FOLLOWING SEQUENCE IS INTENDED TO BE GENERAL AND SHALL NOT BE CONSIDERED DIRECTION BY THE ENGINEER OR THE OWNER. IT IS LIKELY THAT SOME OF THE WORK ITEMS WILL OVERTHEN CONSTRUCTION SEQUENCES FOR THE VARIOUS PROJECT COMPONENTS ARE DESCRIBED SEPARATELY AND MAY NOT NECESSARILY PROCEED IN THE ORDER AS LISTED BELOW. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS.

- 1. MOBILIZE TO THE PROJECT SITE; ESTABLISH SITE ACCESS AND STAGING AREAS;
- INSTALL AND MAINTAIN EROSION CONTROLS IN DESIGNATED AREAS EXCEPT FOR AREAS BEYOND THE UPSTREAM TOE LEFT OF THE PRIMARY SPILLWAY;
- 3. CLEAR, GRUB, AND STRIP ALL VEGETATION TO THE LIMITS SHOWN ON THE PLANS;
- 4. INSTALL AND MAINTAIN DIVERSION SYSTEM TO COMPLETE AND MAINTAIN DRAWDOWN;
- INSTALL AND MAINTAIN EROSION CONTROLS BEYOND THE UPSTREAM TOE LEFT OF THE PRIMARY SPILLWAY;
- DEMOLISH AND REMOVE EXISTING LOW-LEVEL OUTLET (LLO) APPROACH WALLS, MID-LEVEL OUTLET (MLO) APPROACH CHANNEL WALLS, AND MLO APPROACH SLAB, AS NEEDED, FOR THE INSTALLATION OF THE SHEEP PILE CUTOFF WALL:
- INSTALL SHEET PILE CUTOFF WALL FOLLOWED BY THE INSTALLATION OF NEW SECTIONS OF THE MLO CONCRETE APPROACH WALLS AND MLO CONCRETE APPROACH SLAB;
- DEMOLISH, REMOVE, AND DISPOSE OF MLO CONDUIT INCLUDING THE PARTIAL DISMANTLING OF THE PRIMARY SPILLWAY CHANNEL RIGHT WALL AND UPSTREAM MLO HEADWALL, AS NEEDED, TO ALLOW FOR THE DEMOLITION OF THE MLO CONDUIT, FOR THE INSTALLATION OF THE NEW MLO CONDUIT, AND FOR THE INSTALLATION OF THE NEW LLO CONDUIT;
- 10. DEMOLISH, REMOVE, AND DISPOSE OF THE LLO GATE SYSTEM AND CONDUIT INCLUDING THE DISMANTLING OF THE UPSTREAM STONE MASONRY WALL AND MID-SLOPE CONCRETE WALL AS NEEDED, FOR THE DEMOLITION WORK AND FOR THE INSTALLATION OF THE NEW LLO CONDUIT;
- INSTALL A NEW LLO INTAKE STRUCTURE AND CONDUIT INCLUDING THE REBUILDING OF THE DISMANTLED UPSTREAM STONE MASONRY WALL AND PARTIAL REBUILDING OF THE PRIMARY SPILLWAY CHANNEL RIGHT WALL;
- 12. COMPLETE UPSTREAM SLOPE WORK RIGHT OF THE PRIMARY SPILLWAY;
- 13. DISMANTLE AND REBUILD THE RIGHT UPSTREAM WALL STONE MASONRY CAP TO EL. 338.00;
- INSTALL A NEW MLO CONDUIT INCLUDING THE FINAL REBUILDING OF THE PRIMARY SPILLWAY CHANNEL RIGHT WALL;
- 15. INSTALL A NEW GROUTED GRANITE CURB SCOUR APRON IN THE PROPOSED AREA OF THE MLO AND LLO DISCHARGE;
- PREPARE AND DOWEL THE TOP OF THE MLO INTAKE STRUCTURE PERIMETER WALL AND INSTALL CONCRETE WALL EXTENSIONS TO EL. 338.0;

- 19. COMPLETE REPAIRS TO PRIMARY SPILLWAY APPROACH WALLS AND DOWNSTREAM CHANNEL WALLS;
- 20. REHABILITATE UPSTREAM SLOPE RIPRAP LEFT OF PRIMARY SPILLWAY;
- 21. APPLY LOAM AND SEED TO REGRADED EARTHEN SLOPES AND ALL AREAS DISTURBED BY THE CONSTRUCTION ACTIVITIES;

LEGEND EXISTING PROPOSED -(52)-CONTOUR 1' CONTOUR 5' **—**55— EDGE OF WATER PROPERTY LINE ____ RETAINING WALL EDGE OF CREST/PATH RIP RAP TREELINE TREE STRAW BALES •••••• SILT FENCE TURBIDITY BARRIER SHEET PILE COFFERDAM SUPERSACK OR PORTABLE COFFERDAM LIMIT OF DISTURBANCE FEMA FLOOD ZONE WETLAND FLAGS (XXX.XX) ELEVATION

ABBREVIATIONS

CD TEMPORARY COFFERDAM

STRAW STRAW BALE EROSION CONTROL

TB TURBIDITY BARRIER

LOD LIMIT OF DISTURBANCE

SILT SILT FENCE EROSION CONTROL

HARRISVILLE POND DAM

REHABILITATION

RI DAM No. 008

BURRILLVILLE, RHODE ISLAND ISLAND

PARF

PARE CORPORATION

SCALE ADJUSTMENT GUIDE

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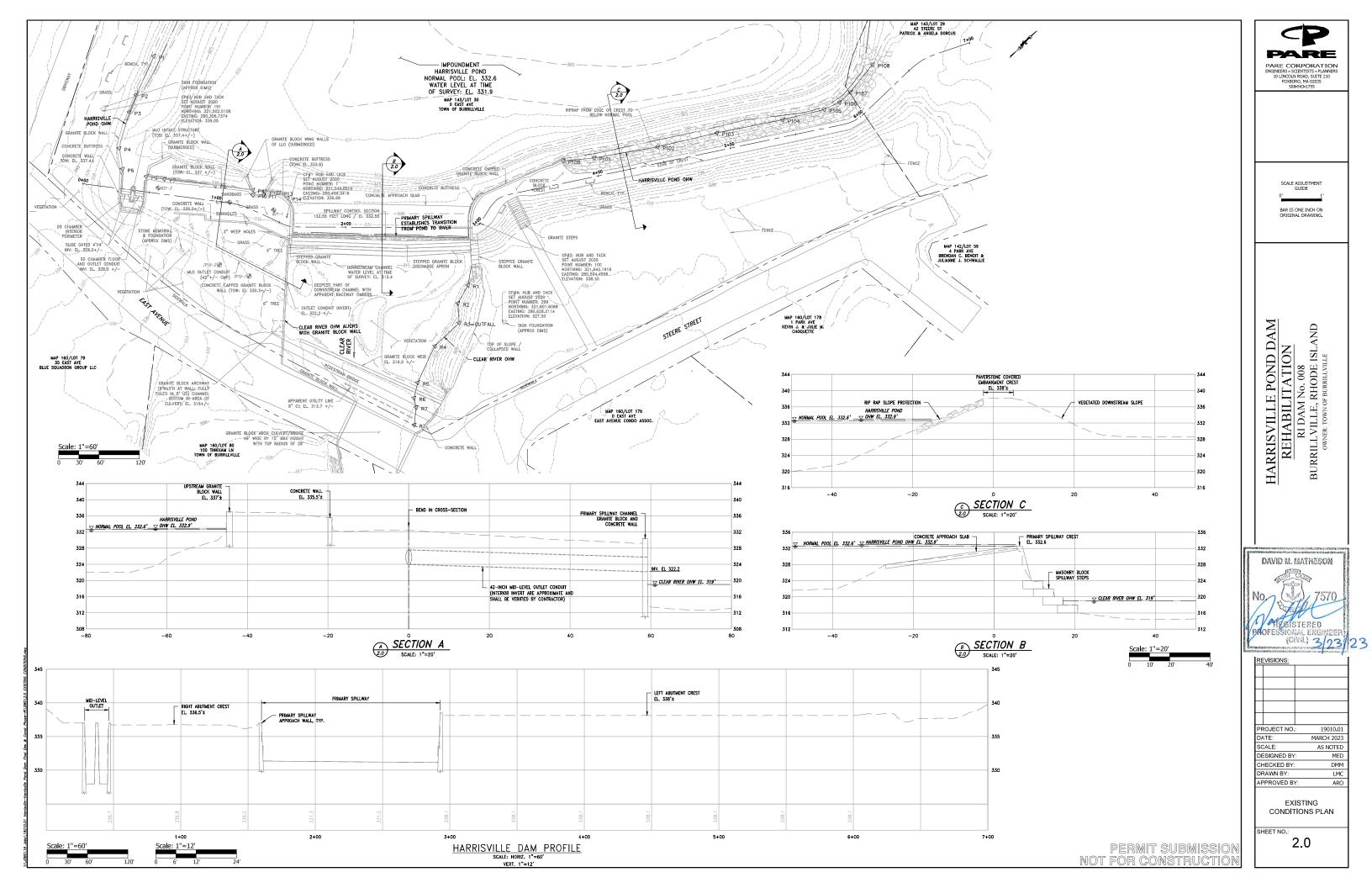
PROJECT NO.:	19010.01
DATE:	MARCH 2023
SCALE:	AS NOTED
DESIGNED BY:	MED
CHECKED BY:	DMM
DRAWN BY:	LMC
ADDROVED BY	. ADC

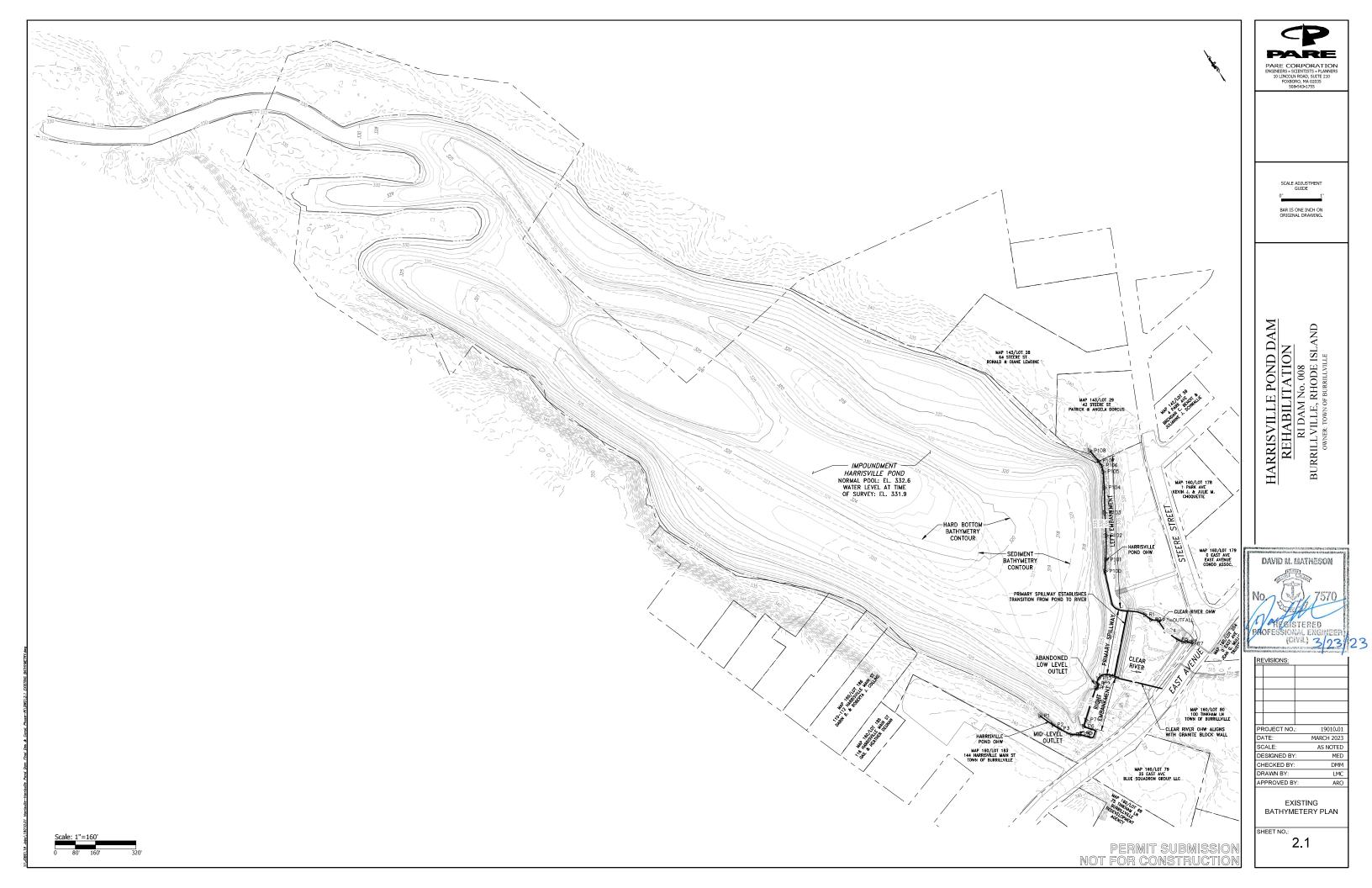
GENERAL NOTES AND LEGEND

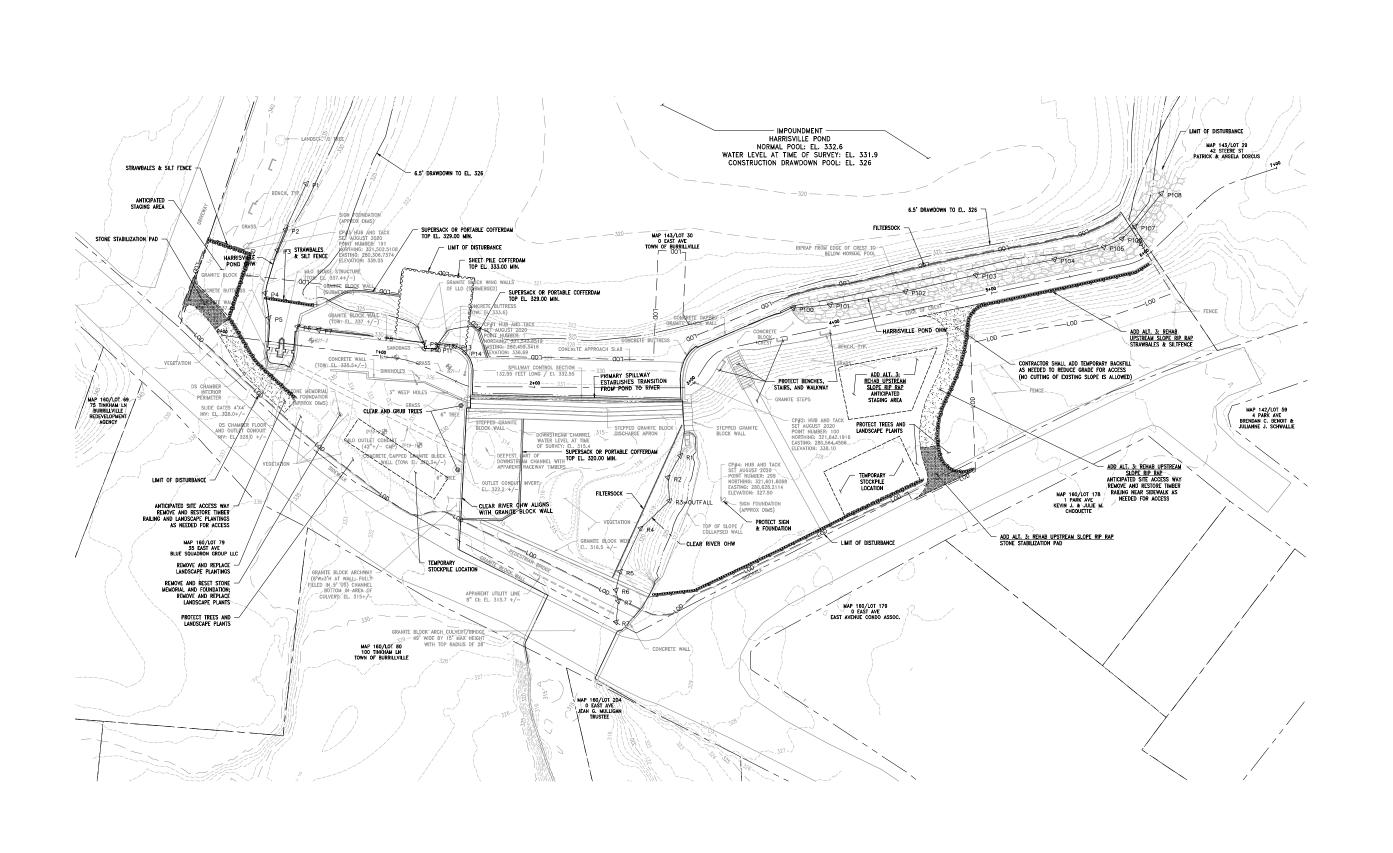
SHEET NO

1.0

PERMIT SUBMISSION







PARE CORPORATION



SCALE ADJUSTMENT GUIDE

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HARRISVILLE POND DAM

REHABILITATION

RI DAM No. 008

BURRILL VILLE, RHODE ISLAND

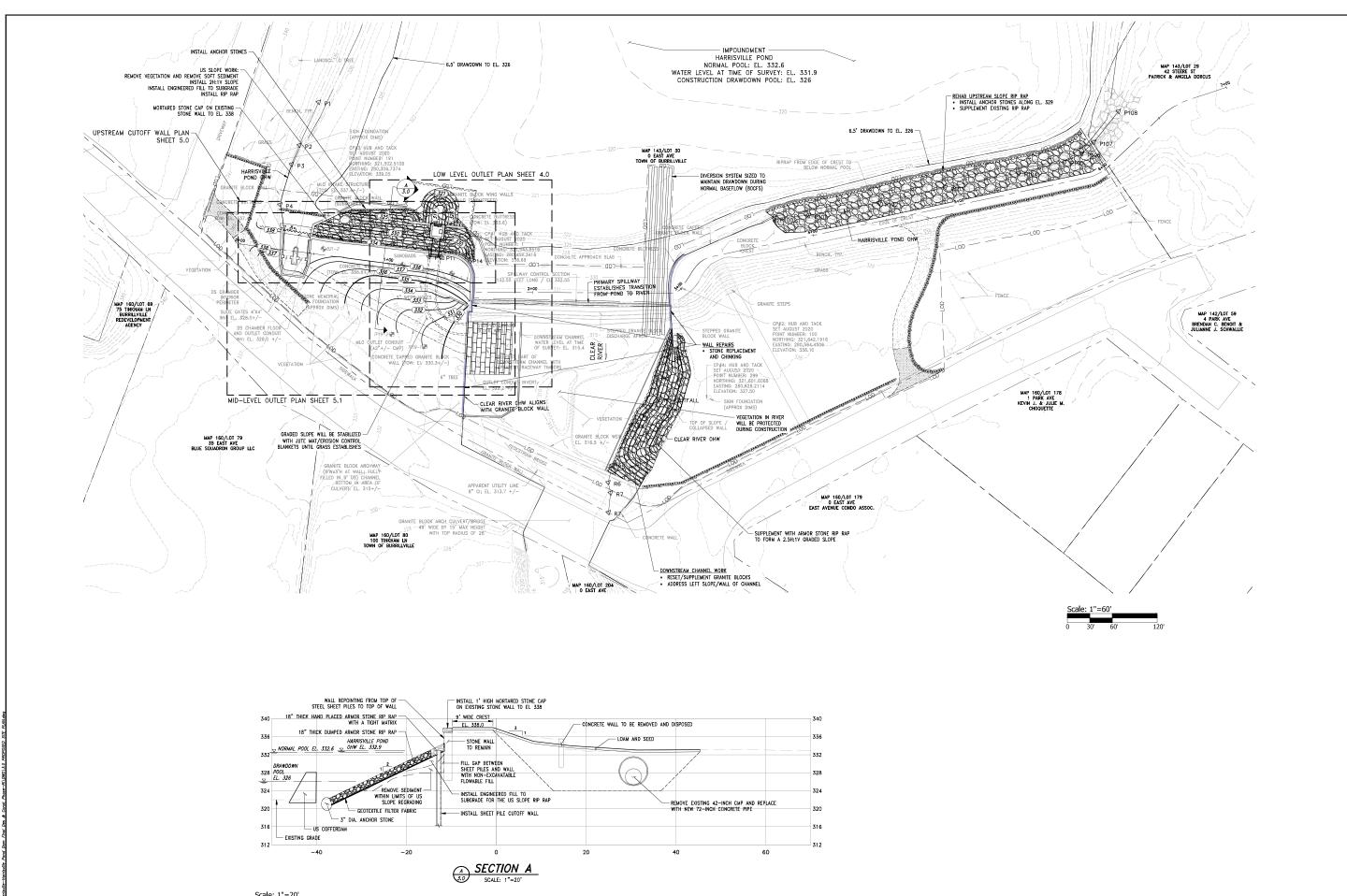
OWNER: TOWN OF BURRILLYILLE

DAVID M. MATHESON ANTEISTERED

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	CH	HECKED BY:	DMM
	DF	RAWN BY:	LMC
	ΑF	PROVED B	Y: ARO

EROSION CONTROL PLAN

SHEET NO.



PARE CORPORATION
EIGINERS - SCIENTIST - PLANNERS
10 LINCOLN ROAD, SUITE 210
FOXOROR, MA 02035



SCALE ADJUSTMENT GUIDE

0" 1"

BAR IS ONE INCH ON ORIGINAL DRAWING.

HARRISVILLE POND DAM

REHABILITATION

RI DAM No. 008

BURRILL VILLE, RHODE ISLAND

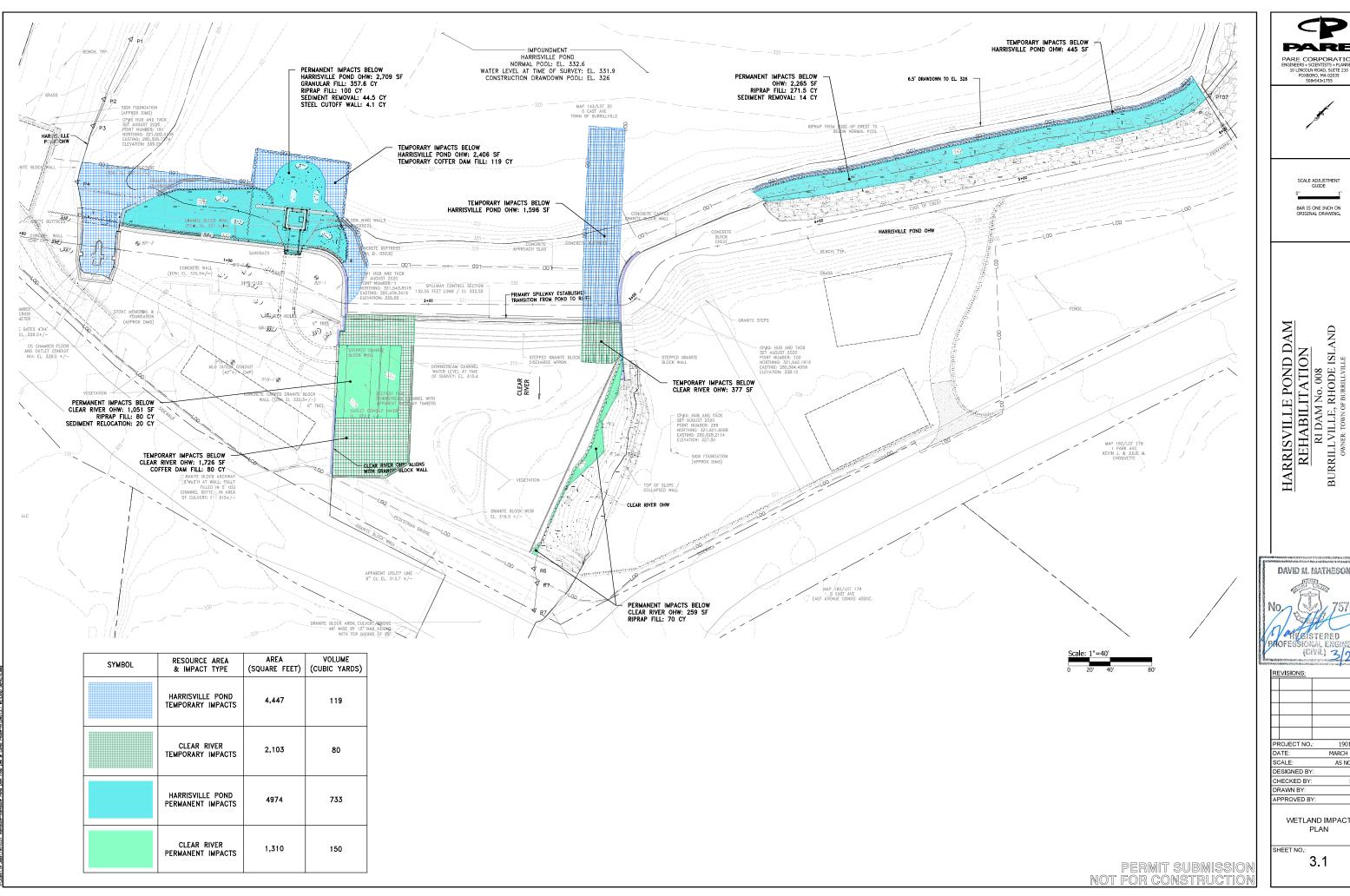
OWNER: TOWN OF BURRILLYILLE



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PROJECT NO.	19010.01			
DATE:	MARCH 2023			
SCALE:	AS NOTED			
DESIGNED BY	: MED			
CHECKED BY:	DMM			
DRAWN BY:	LMC			
APPROVED BY	Y: ARO			

PROPOSED SITE PLAN

SHEET NO.:



PARE PARE CORPORATION



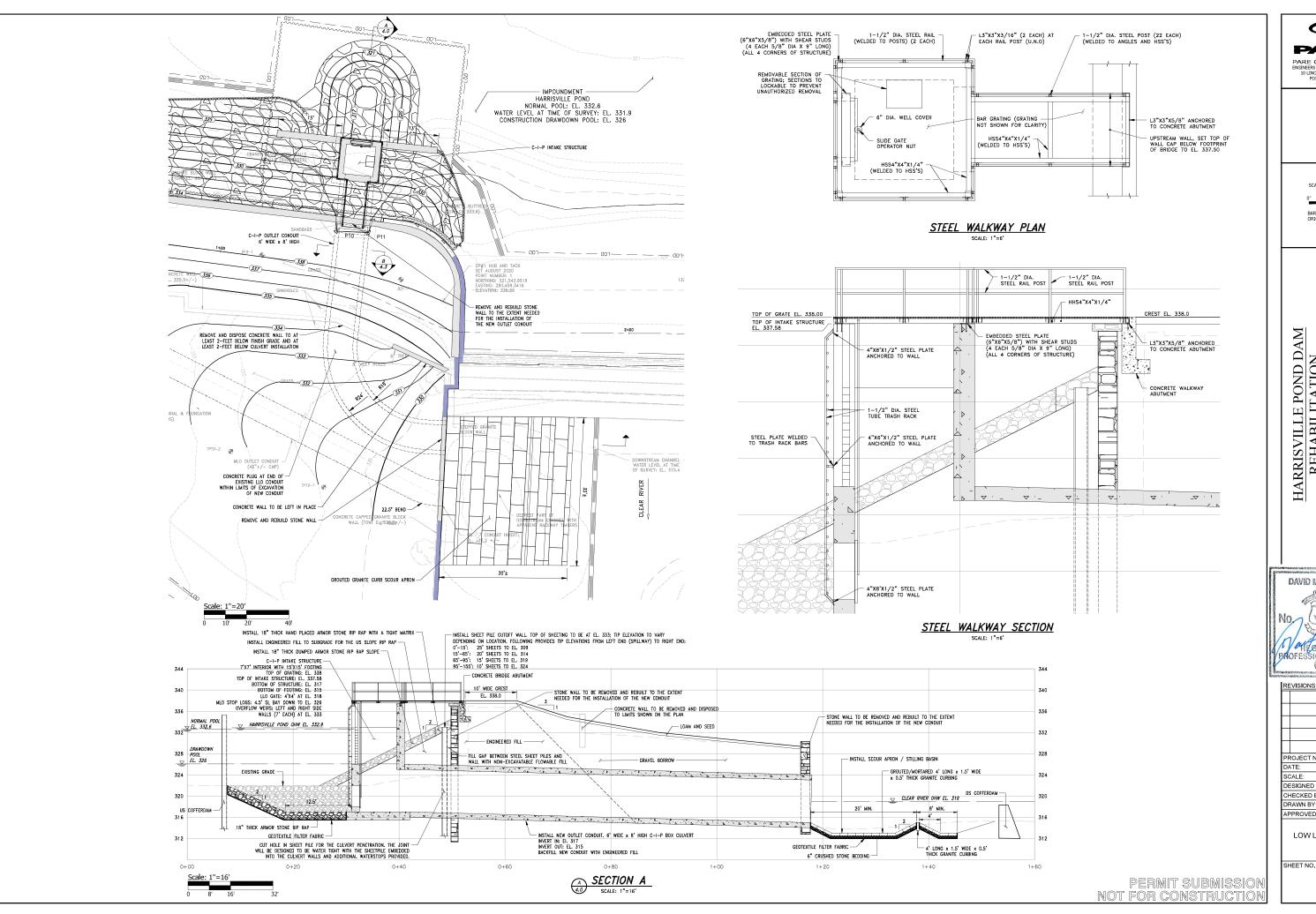
SCALE ADJUSTMENT GUIDE

BAR IS ONE INCH ON ORIGINAL DRAWING.



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REVISIONS:			
PROJECT NO	.: 19010.01		
DATE: MARCH 202			
SCALE: AS NOTED			
DESIGNED BY: MED			
CHECKED BY: DMM			
DRAWN BY: LMC			
APPROVED B	Y: ARO		

WETLAND IMPACT PLAN







SCALE ADJUSTMENT GUIDE

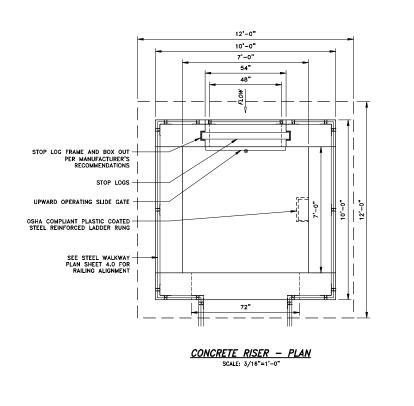
BAR IS ONE INCH ON ORIGINAL DRAWING.

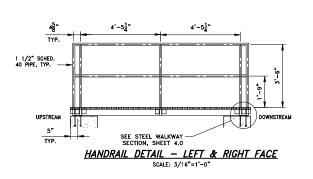
HARRISVILLE POND DAM REHABILITATION RI DAM No. 008 BURRILLVILLE, RHODE ISLAND OWNER-TOWN OF BURRILLVILLE

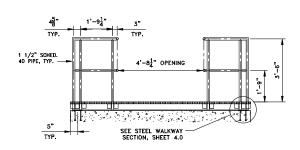


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DRAWN BY:	LMC		
APPROVED B	Y: ARO		
LOWLEVEL OUTLET			

PLAN





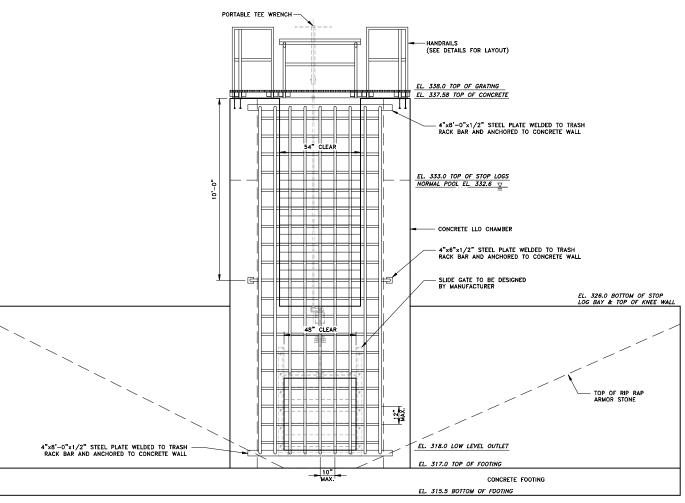


HANDRAIL DETAIL - DOWNSTREAM FACE

3'-113" 1 1/2" SCHED. 40 PIPE, TYP. -SEE STEEL WALKWAY SECTION, SHEET 4.0 SECTION A-A NOTES:

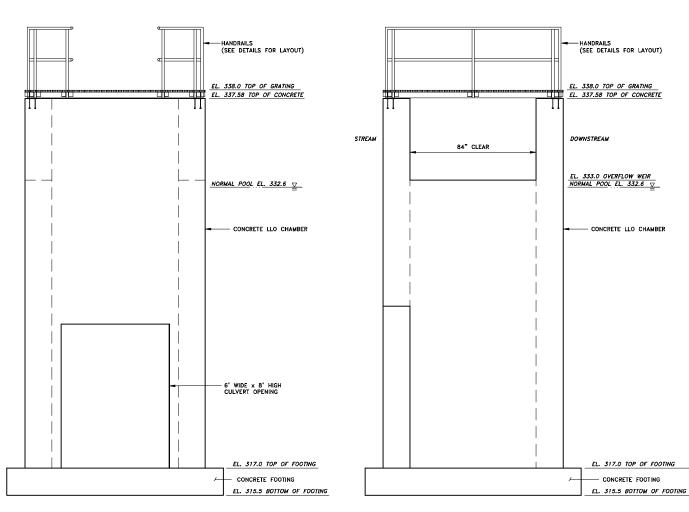
- 1. INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
- 2. RAILING SHALL COMPLY WITH ADA AND MAAB REGULATIONS.
- 3. CONTRACTOR SHALL SUBMIT PRODUCT FOR APPROVAL

HANDRAIL DETAIL - UPSTREAM FACE SCALE: 3/16"=1'-0"



CONCRETE RISER
UPSTREAM WALL ELEVATION

SCALE: 3/16"=1'-0"



<u>CONCRETE RISER</u> <u>DOWNSTREAM WALL ELEVATION</u> SCALE: 3/16"=1'-0"

CONCRETE RISER
LEFT AND RIGHT WALL ELEVATION SCALE: 3/16"=1'-0"

PERMIT SUBMISSION

PARE CORPORATION

SCALE ADJUSTMENT GUIDE

BAR IS ONE INCH ON

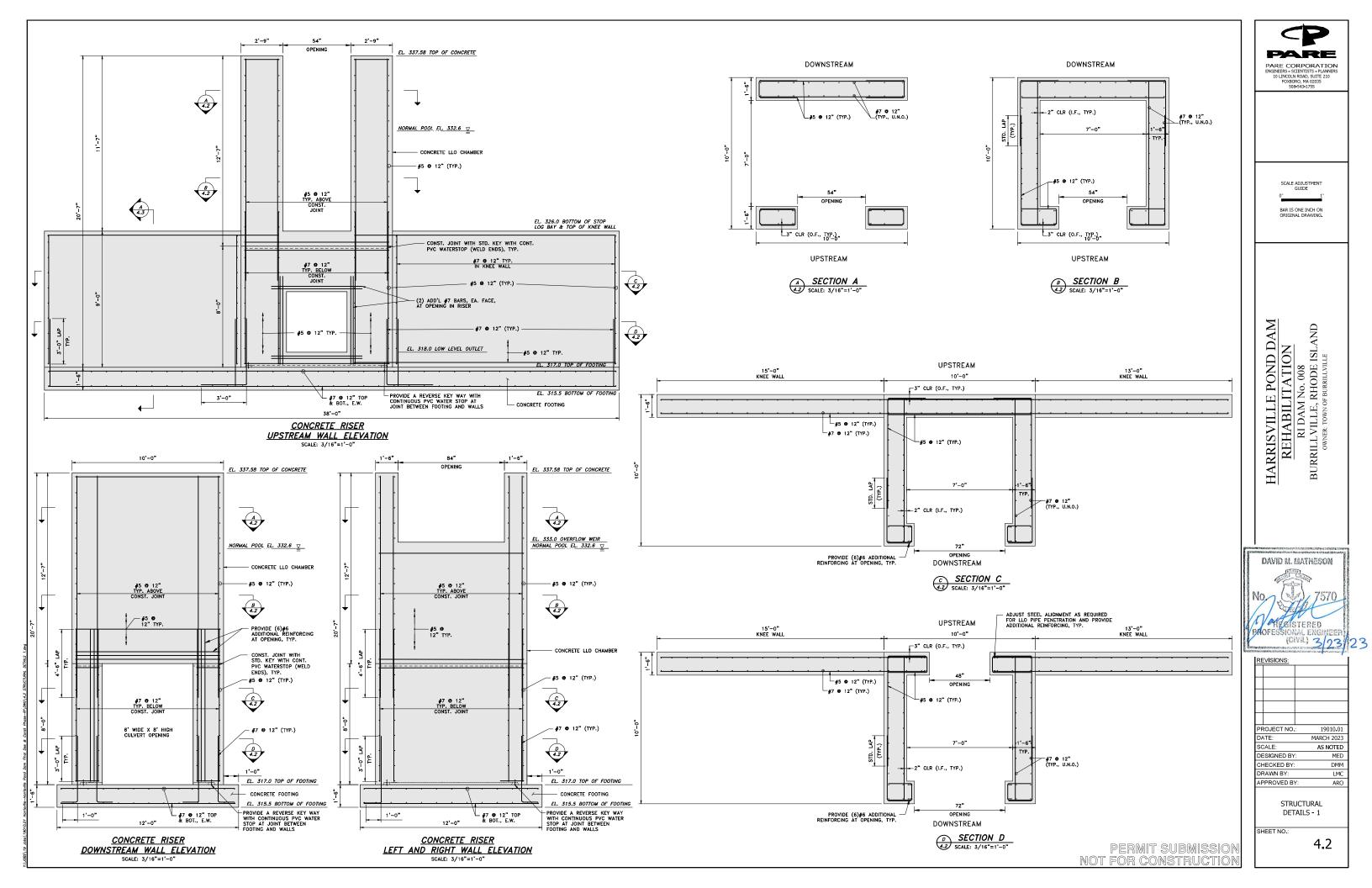
HARRISVILLE POND DAM
REHABILITATION
RI DAM No. 008
BURRILLVILLE, RHODE ISLAND
OWNER TOWN OF BURRILLVILLE

DAVID M. MATHESON PAVEISTERED (CIVIL) 3/23/23

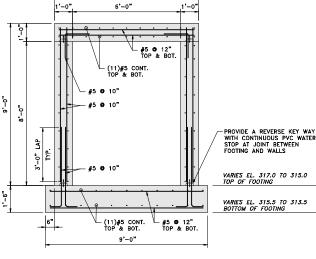
REVISIONS PROJECT NO.: 19010.01 DATE: MARCH 2023 SCALE: AS NOTED DESIGNED BY: MED CHECKED BY: DMM DRAWN BY: LMC APPROVED BY: ARO

LOW LEVEL OUTLET DETAILS

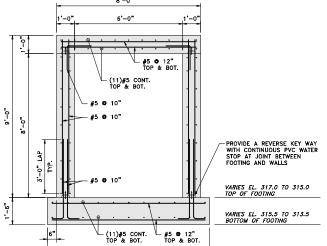
SHEET NO.







B CULVERT SECTION B
SCALE TYPE

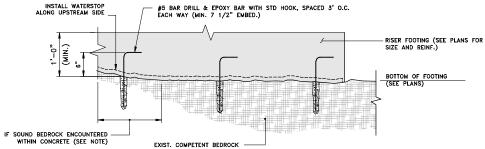


CONCRETE NOTES

- CONCRETE WORK SHALL CONFORM TO THE LATEST ADDITIONS OF THE "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318) AND THE MASSACHUSETTS STATE BUILDING CODE.
- CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED UNDER THE SUPERVISION OF THE APPROVED TESTING AGENCY.
- CONCRETE SHALL BE NORMAL WEIGHT, WITH TYPE II CEMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 5,000 PSI 3/4" AGGREGATE TYPICAL.
- 4. ALL CONCRETE SHALL BE AIR-ENTRAINED WITH AN AIR CONTENT OF 6% +/- 1%.
- 5. CALCIUM CHLORIDE SHALL NOT BE USED.
- DO NOT BACKFILL AGAINST CONCRETE WALLS UNTIL WALLS AND SUPPORTING SLABS HAVE REACHED THE 7-DAY SPECIFIED STRENGTH.
- PROVIDE A SMOOTH RUBBED SURFACE, FREE FROM BURRS, TIE HOLES, HONEYCOMB-ING, ETC. ON EXPOSED CONCRETE WALLS.
- 8. ALL EXPOSED EDGES SHALL BE CHAMFERED 3/4" UNLESS NOTED OTHERWISE
- WHEN CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE INTERFACE SHALL BE CLEAN, FREE OF LAITANCE, AND INTENTIONALLY ROUGHENED TO FULL AMPLITUDE OF APPROXIMATELY 1/4 INCH.
- 10. ALL CONCRETE SHALL BE PLACED IN THE DRY.

REINFORCING STEEL NOTES

- REINFORCING BARS SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES AND THE MASSACHUSETTS STATE BUILDING CODE.
- COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ROINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK. ALL ACCESSORIES MUST BE SHOWN ON THE SHOP DRAWINGS.
- 3. REINFORCING BARS SHALL CONFORM TO ASTM A615 OR A706 (WELDABLE) GRADE 60.
- ALL REINFORCING STEEL SHALL BE HOT-DIP GALVANIZED. ALL SUPPORTS SUCH AS CHAIRS, BOLSTERS, SPACERS, BLOCKS AND HANGERS SHALL BE OF NON-CORROSIVE MATERIAL.
- 5. UNLESS NOTED ON THE DRAWINGS, THE MINIMUM CONCRETE PROTECTION (CLEAR COVER) FOR CAST-IN-PLACE CONCRETE COVER SHALL BE AS FOLLOWS:
- d. FORMED CONCRETE EXPOSED TO EARTH OR WATER....
- 6. MINIMUM REINFORCEMENT DEVELOPMENT LENGTH SHALL BE IN ACCORDANCE WITH ACI 318 UNLESS NOTED ON THE DRAWINGS.



TYPICAL FOUNDATION BEARING ON BEDROCK DETAIL (IF REQUIRED)

2. CONCRETE BEARING ON COMPETENT BEDROCK SHALL CONFORM TO THE FOLLOWING CRITERIA:

BEDROCK DEPTH < 1'-0" BELOW TOP OF WALL FOOTING OR SCOUR PAD MAT SLAB:

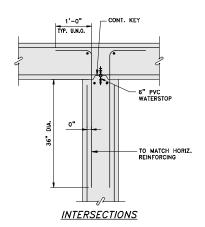
REMOVE BEDROCK TO 1'-0" BELOW TOP OF FOOTING OR MAT SLAB AND PLACE CONCRETE ON ROCK. DOWEL FOOTING OR SLAB TO BEDROCK AS SHOWN AND ADJUST REINFORCING HEIGHT AS REQUIRED.

BEDROCK DEPTH > 1'-0" BELOW TOP OF WALL FOOTING OR SCOUR PAD MAT SLAB:

U-BARS AT OPENINGS AND DISCONTINUED ENDS OF WALLS **CORNERS**

- HORIZ. BARS

<u>ENDS</u> PLAN OF HORIZONTAL REINFORCING SCALE: 3/8"=1'-0

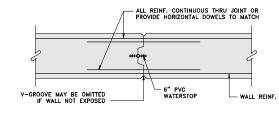


SAME SIZE AND SPACIN AS HORIZONTAL REINF. (L = 80 X DIA.)

- 2. CONSTRUCTION JOINT MAY BE SUBSTITUTED FOR A CONTROL JOINT.

TYPICAL CONTROL JOINT DETAIL

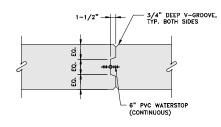
SCALE: 3/8"=1'-0"



PROVIDE CONSTRUCTION JTS © 60' O.C. (MAX.) ALTERNATE PLACING OF PANELS, ALLOWING 36 HOURS FROM THE END OF ONE POUR TO THE BEGINNING OF ADJACENT POURS.

TYPICAL CONSTRUCTION JOINT DETAIL

SCALE: 3/8"=1'-0"



STANDARD KEY DETAIL SCALE: 3/8"=1'-0'

PROJECT NO .: 19010.01 DATE: MARCH 2023 SCALE: AS NOTED DESIGNED BY CHECKED BY DMM DRAWN BY APPROVED BY

PARE CORPORATION

SCALE ADJUSTMENT GUIDE

BAR IS ONE INCH ON ORIGINAL DRAWING.

HARRISVILLE POND DAM
REHABILITATION
RI DAM No. 008
BURRILL VILLE, RHODE ISLAND
OWNER.TOWN OF BURRILLAILLE

DAVID M. MATHESON

MESISTERED

REVISIONS

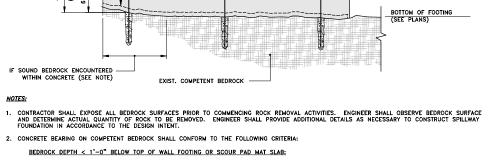
(CIVIL) 3/23

STRUCTURAL DETAILS - 2

SHEET NO.

4.3

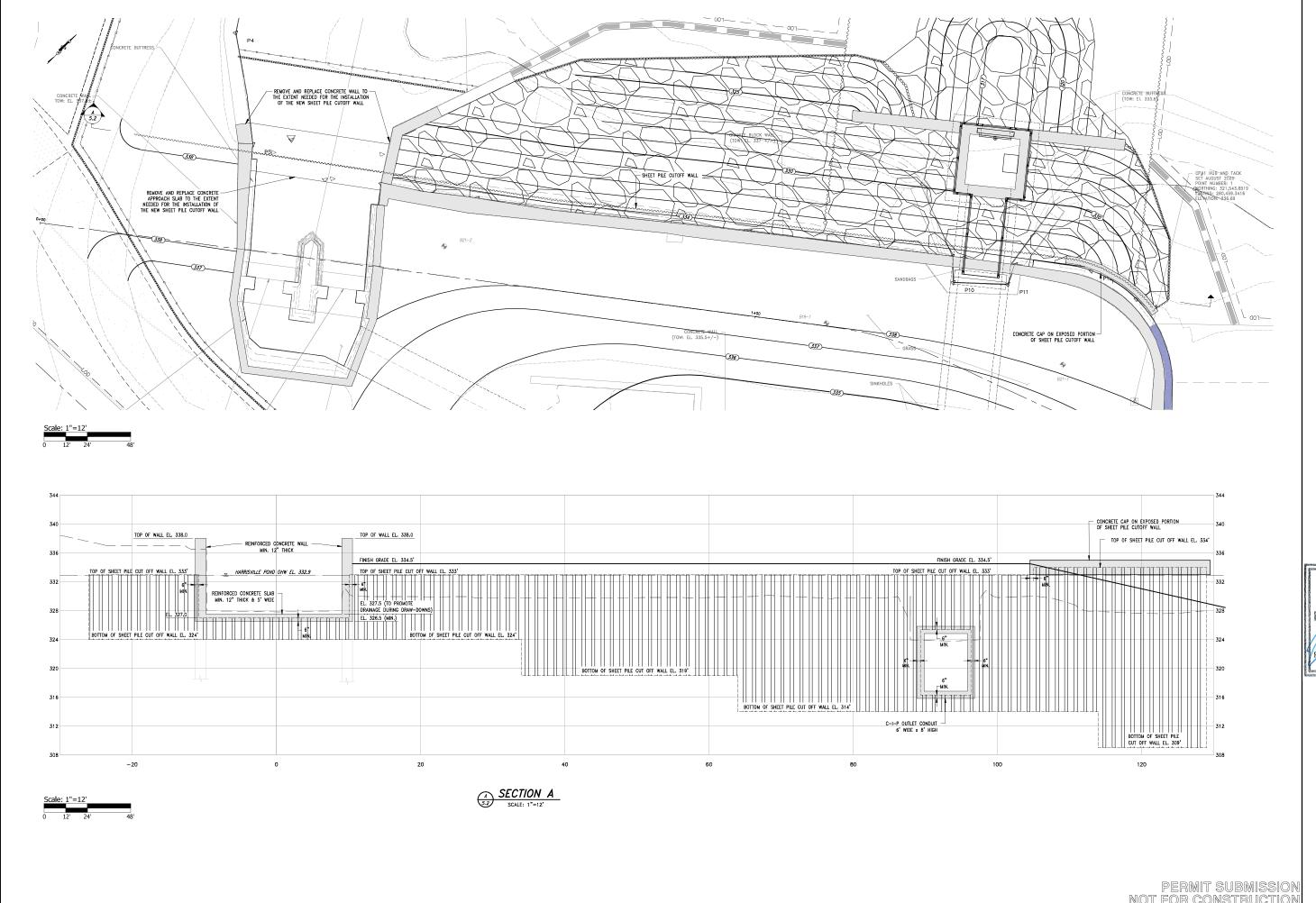
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PLACE CONCRETE OR ENGINEERED FILL ON ROCK. DOWEL FOOTING OR SLAB TO BEDROCK AS SHOWN AND ADJUST REINFORCING HEIGHT AS REQUIRED.

NOTES:

1. SPACE AT 20'-0" CENTER TO CENTER MAX.



PARE CORPORATION

BAR IS ONE INCH ON ORIGINAL DRAWING.

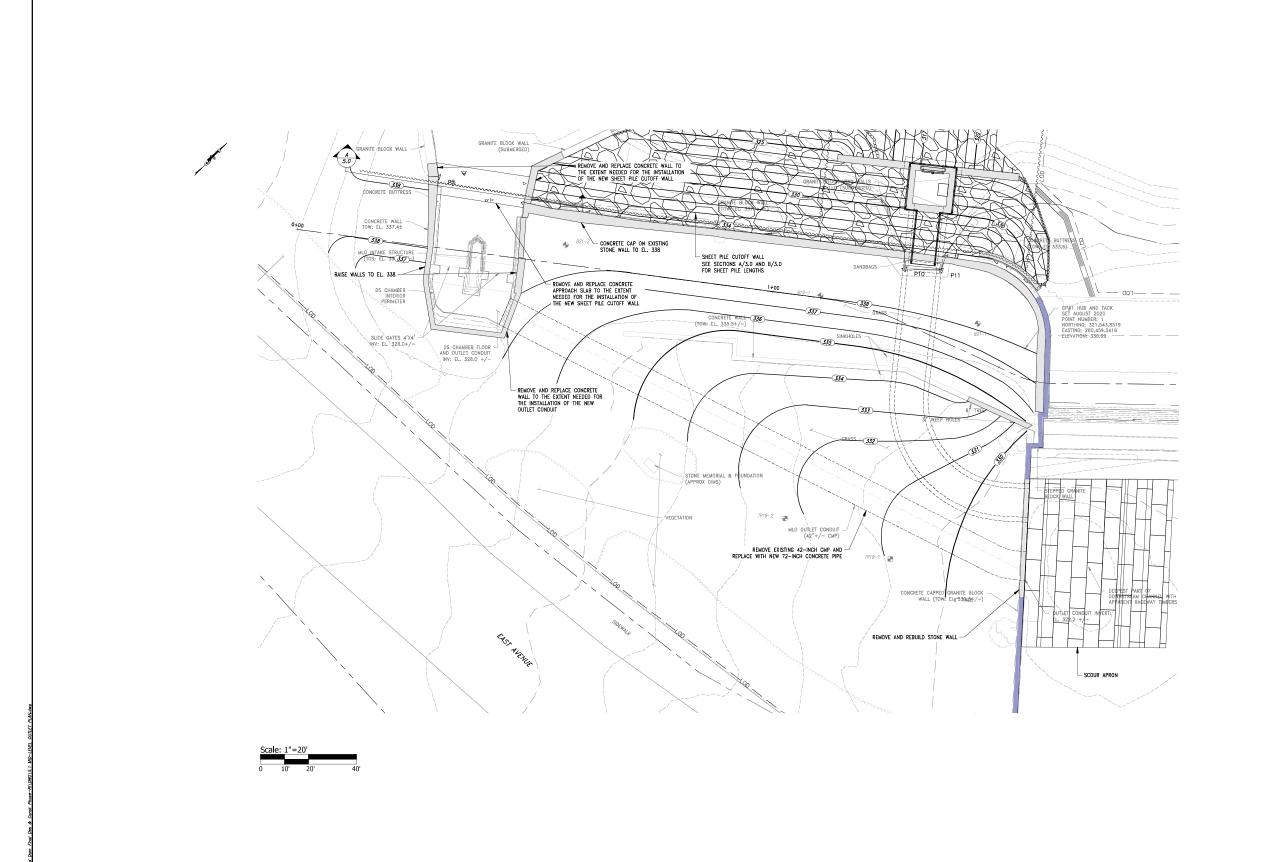
HARRISVILLE POND DAM
REHABILITATION
RI DAM No. 008
BURRILLVILLE, RHODE ISLAND
OWNER: TOWN OF BURRILLVILLE

DAVID M. MATHESON PHESISTERED professional engineer (Civil.) 3/23/23

19010.01 PROJECT NO.: DATE: MARCH 2023 SCALE: AS NOTED DESIGNED BY: MED CHECKED BY: DMM LMC DRAWN BY:

> UPSTREAM **CUTOFF WALL** PLAN AND SECTION

APPROVED BY:

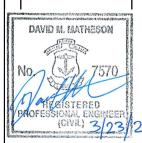




SCALE ADJUSTMENT GUIDE

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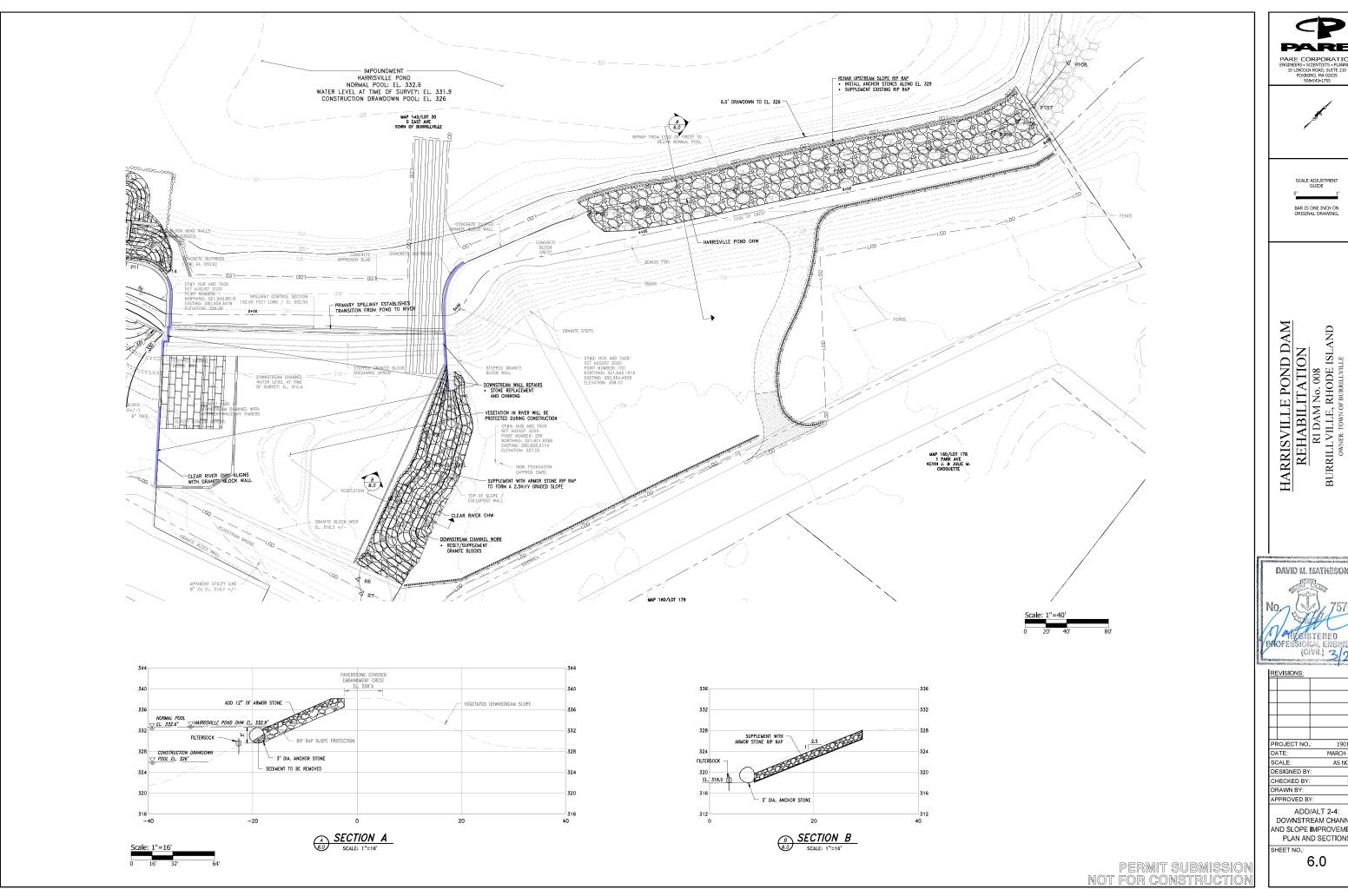
HARRISVILLE POND DAM
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	CH	HECKED BY:		DMM	
	DF	RAWN BY:		LMC	
	ΑF	PROVED B	Y:	ARO	

MID-LEVEL OUTLET PLAN

SHEET NO.:



PARE CORPORATION

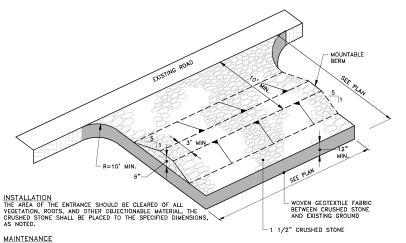


BAR IS ONE INCH ON ORIGINAL DRAWING.

DAVID M. MATHESON PARSISTERED (CIVIL) 3/23/

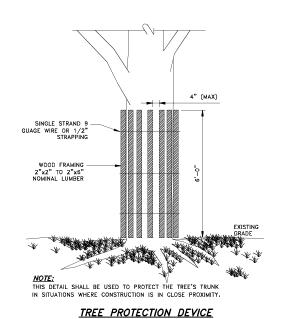
19010.01 MARCH 2023 AS NOTED MED DMM LMC APPROVED BY

ADD/ALT 2-4: DOWNSTREAM CHANNEL AND SLOPE IMPROVEMENTS PLAN AND SECTIONS



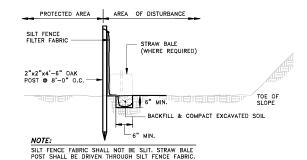
MAINTENANCE
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL
PREVENT TRACKING OR FLOWING OF SEDIMENTS ONTO PUBLIC
RIGHT—OF—WAYS THIS WILL REQUIRE PERIODIC TOP DRESSING WITH
ADDITIONAL STORE, OR ADDITIONAL LENGTH, AS CONDITIONS
DEMAND, AND REPAIR, AND / OR CLEANOUT OF ANY MEASURES
USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED,
WASHED OR TRACKED ONTO PUBLIC RIGHT—OF—WAYS MUST BE
REMOVED IMMEDIATELY.

LOCATION SEE PROJECT PLANS FOR LOCATION OF CONSTRUCTION ENTRANCE. CONSTRUCTION ENTRANCE PROTECTION STONE STABILIZATION PAD

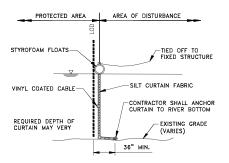


FLOW EACH BALE TO BE APPROXIMATELY 36"x18"x24" TYP. <u>PLAN</u> **ELEVATION**

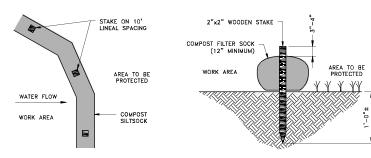
> STRAW BALE DETAIL NOT TO SCALE



SILT FENCE DETAIL



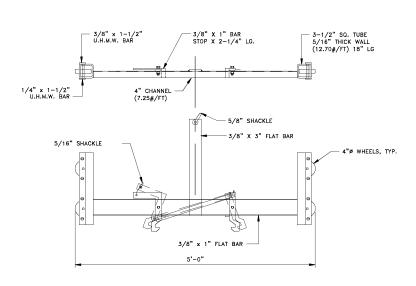
TYPICAL TURBIDITY BARRIER



NOTES:

- 1. COMPOST/ SOIL/ ROCK/ SEED FILL TO MEET APPLICATION REQUIREMENTS.
- 2. COMPOST MATERIAL TO BE REMOVED OR DISPERSED ON SITE AS DETERMINED BY ENGINEER.
- 3. IF SOCK NETTING MUST BE JOINED, FIT BEGINNING OF NEW SOCK OVER END OF OLD SOCK, OVERLAPPING BY 2 FEET AND STACK OVERLAP. IF SOCK NETTING IS NOT JOINED, OVERLAP OLD SOCK WITH NEW ONE BY MINIMUM OF 2 FEET.

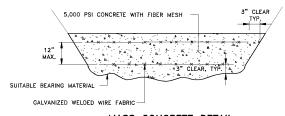
COMPOST FILTER SOCK DETAIL



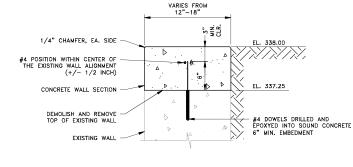
STOP LOG LIFTER HOOK DETAIL

- KEY EACH LIFT OF FILL INTO THE EXISTING EMBANKMENT AFTER REMOVAL OF ALL TOPSOIL, ORGANIC MATERIAL, OR LOOSE SEDIMENT. L 10" COMPACTED LIFT (TYP)

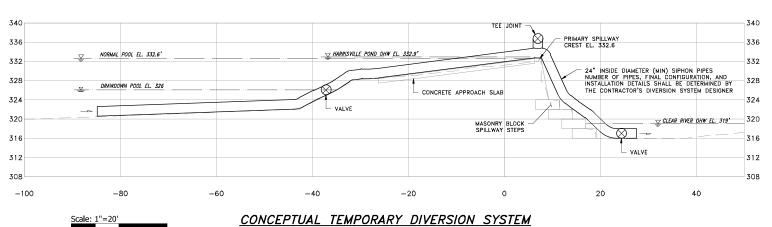
PLACEMENT OF FILL MATERIALS



MASS CONCRETE DETAIL



MID LEVEL OUTLET WALLS REHABILITATION DETAIL



FINAL DIVERSION SYSTEM DESIGN AND LOCATION IS THE RESPONSIBILITY OF THE CONTRACTOR SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER SCALE: 1"=20'

PERMIT SUBMISSION

PARE PARE CORPORATION

BAR IS ONE INCH ON

HARRISVILLE POND DAM

REHABILITATION

RI DAM No. 008

BURRILL VILLE, RHODE ISLAND

OWNER, TOWN OF BURRILLYJILE

DAVID M. MATHESON MESISTERED (CIVIL) 3/23

> REVISIONS PROJECT NO .: 19010.01 DATE: MARCH 2023 SCALE: AS NOTED DESIGNED BY MED CHECKED BY DMM DRAWN BY: LMC PPROVED BY ARO

> > MISCELLANEOUS DETAILS

SHEET NO.