KENNEBUNK SEWER DISTRICT BOARD OF TRUSTEES MONTHLY MEETING, MAY 6, 2025

The Board of Trustees of the Kennebunk Sewer District held its regular monthly meeting on Tuesday, May 6, 2025, in the conference room at 44 Water Street.

Trustees present Patrick Wiley, Chairman

Jason **Wise**, Vice Chairman Wayne A. **Brockway**, Treasurer

Robert **Brady**, Clerk Aaron **Nalezny**, Trustee

KSD Staff present Chris Gallant, KSD District Manager

Chris Johnson, KSD Project Manager / Assistant District Manager

Others present Mark K. Allenwood, Project Manager, Brown & Caldwell, Andover, MA

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AGENDA:

Unfinished Business

New Business

- 1. Minutes of the April 8, 2025, Board of Trustee Meeting
- 2. Biological Design Update
- 3. Western Ave. Construction Update

Other Business

4. Manager's Report

Adjournment

5. Adjournment

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Chairman Wiley called the meeting to order at 7:00 p.m.

There being no objections from the Board, and in consideration of Project Manager **Allenwood**'s presence, Chairman **Wiley** moved ahead to agenda item #2.

Agenda Item – (New Business) #2: Biological Design Update

Referring to the Brown & Caldwell document package titled 100% DESIGN – KSD KENNEBUNK WWTF NUTRIENT REMOVAL IMPROVEMENTS, (provided as Enclosure 1), which is incorporated by reference into these minutes, was distributed to all members present, and contains the following drawings:

Drawing # C-10-103 SITE AND PAVING PLAN

Drawing # A-20-201 BNR - ELECTRICAL BUILDING - ELEVATIONS 1

Drawing # A-20-202 BNR – ELECTRICAL BUILDING – ELEVATIONS 2

Drawing # A-20-301 BNR - ELECTRICAL BUILDING - WALL SECTION AND DETAILS

Drawing # M-20-301 BNR – SECTIONS 1

Drawing # M-20-302 BNR – SECTIONS 2

Drawing # M-30-106 RAS PUMP STATION – PLAN

Project Manager **Allenwood** provided an overview of the upgrade to the wastewater treatment plant's biological system design. His presentation included the following topics and highlights:

• C-10-103 SITE AND PAVING PLAN

- Access road and control building locations.
- The system description was characterized as a 2 train, 4 stage, "Bardenpho" type (a specific method of wastewater treatment).
- The clarifier (a tank designed to remove suspended solids from wastewater through settling) will remain and be rehabilitated.
- o The process building will receive new chemical feed systems.

• A-20-201 BNR – ELECTRICAL BUILDING – ELEVATIONS 1 (North and South)

- o Architectural renditions of the aeration tank and the equipment building next to it.
- o Elevations at ground level and the top of the roof.
- Contents of the equipment building include:
 - ✓ BNR (Biological Nutrient Removal) process tanks aeration blowers
 - ✓ Bubble mix system compressors.
 - ✓ Chemical feed for alkalinity control.
 - ✓ An electrical room that houses all of the new electrical components for the BNR (Biological Nutrient Removal) tank, the aeration blowers, and the pump house between the clarifiers.

• A-20-202 BNR – ELECTRICAL BUILDING – ELEVATIONS 2 (East and West)

o Architectural renditions of the building layouts.

• A-20-301 BNR – ELECTRICAL BUILDING – WALL SECTION AND DETAILS

- o A section through the building showing:
 - ✓ The lower level blower room, the alkalinity room above the blower room, and the electrical room above the alkalinity room.
 - ✓ None of the rooms are confined spaces.

• M-20-301 BNR – SECTIONS 1

- Sections through the BNR (Biological Nutrient Removal) tanks showing the 4 Anoxic zones and the 2 Aeration zones.
- Sections through the equipment building showing the layouts of bubble mix system compressors 1 & 2 and aeration blowers 1 & 2.
- o Alkalinity feed pipes 1 &2.

• M-20-302 BNR – SECTIONS 2

- o Internal recycle pump station.
- Inlet and outlet boxes.
- o A section through the anoxic, aerobic, anoxic little aerobic, and the mixed liquor channel.

• M-30-106 RAS PUMP STATION – PLAN

- o A section through the pump house between the clarifiers.
- o Pipe removal and replacement.
- Instruction to KSD personnel regarding construction, sequencing, and maintaining WWTF operations during construction were addressed.

Treasurer **Brockway** asked if rehabilitating the clarifiers was a cost savings measure.

Project Manager Allenwood replied that the existing clarifiers are not compatible with the new BNR (Biological Nutrient Removal) system because the sludge needs to be removed much faster than the existing system is capable of achieving; consequently, the clarifier "modification" is actually a complete removal of everything except the concrete walls, which are in good shape and do not require rehabilitation. The replacement clarifier system is a unique design known as the Tow-Bro® Hydraulic Sludge Removal System which ensures rapid removal of settled sludge with minimal sludge blanket disturbance.

Project Manager Allenwood addressed the issue of building code changes by providing the following information:

- The design for the wastewater treatment plant's biological system upgrade uses building codes approved in 2015.
- On January 7, 2025, the new 2021 building codes were adopted.
- On April 7, 2025, the new 2021 building codes went into effect.
- Impacts of the 2021 building codes on the design consist of the following:
 - o Code references and specifications will need to be changed throughout the drawings.
 - O New seismic coefficients will require a rerun of the model.
 - o Electrical specification will need to be updated.
 - o The cost for making the changes is estimated to be approximately \$10,000 with 40 hours of work.
 - O An amendment for the changes to the drawings will be produced.
- Impacts of the 2021 building codes on the project cost, provided by Ellana Inc. Construction Consultants, New York, NY, consist of the following:
 - The project cost estimate, without any contractor markups, is \$21,250,000.
 - Ellana Inc. carries a 38% contractor markup (which includes trying to forecast steel costs and tariffs) but Brown & Caldwell expects a markup of 15% to 20% which would add \$3 to \$4 million of contractor markups putting the total project cost estimate at \$24 million.

Project Manager Allenwood provided the following information regarding project bidding:

- Shortlist packages were sent out to general contractors on April 15, 2025.
- Shortlist packages are due back by May 15, 2025.
- Shortlist results will be compiled by May 30, 2025.
- Bid opening is expected to be in mid-July 2025.
- Contract award will probably be late summer 2025 or early fall 2025.
- Bidders requested the option to start construction over the winter, if the winter is mild, and have a two year construction period to commence in the spring 2026.

Project Manager **Allenwood** provided the following information regarding additional power and chemical cost to operate the upgrade:

- With the removal of the RBCs (Rotating Biological Contactor) electrical power costs savings will be approximately \$90,000 per year.
- The following new systems: blowers, alkalinity feed, recirculation pumps, carbon feed, air handling, building heat, and other miscellaneous loads, will add an additional electrical cost of approximately \$102,000 per year.
- The difference in power requirements resulting from RBC (Rotating Biological Contactor) removal (-\$90.000) and the new systems installation (+\$102,000) will result in an additional power cost of approximately \$10,000 to \$15,000 per year.
- Additional annual chemical cost, with the system operating at full capacity of 1.3 MGD (Million Gallons per Day), is estimated to be approximately \$100,000 as detailed below:
 - o Alkalinity, \$30,000.
 - o "Micro C" (for additional carbon), \$70,000.

Project Manager Allenwood provided the following additional comments:

- Brown & Caldwell received final approval for the design from MDEP (Maine Department of Environmental Protection) on April 24, 2025.
- Bid opening is scheduled for July 16, 2025.
- A construction period of 2 ½ years is allowed with a start in March 2026.

District Manager **Gallant** noted that, based on Project Manager **Allenwood**'s presented schedule, a new financing strategy will be developed and presented at a later date.

A discussion developed regarding the status of the RBC (Rotating Biological Contactor) building after the new BNR (Biological Nutrient Removal) system has been brought online. Highlights included:

- The demo of the RBC (Rotating Biological Contactor) building is a bid alternate.
- There would be no cost for keeping the building available for any period of time; however, KSD's plan is for the building to be removed at some future date.

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- If KSD's (TN) Total Nitrogen limit ever gets down to 3 mg/L at 1.31 MGD (Million Gal per Day) flow, the total area occupied by the current RBC (Rotating Biological Contactor) building would be needed for new filters, whether it is a new structure or the existing one.
- The cost to remove the building (leaving the foundation intact) is estimated to be approximately \$2.2 million.
- The building contains a small amount of hazardous material which consist of minimal caulking and some lead based paint.

Treasurer Brockway asked for clarification of construction management.

Project Manager Allenwood provided the following details:

- A Brown & Caldwell representative will be on-site full time for all inspections, submittals, pay requests, and scheduling.
- A fee proposal (expected to be approximately 10% of the total project cost) will be presented to KSD at a future date.

With no further questions, Project Manager Allenwood departed the meeting at 7:28 p.m..

With no Board action required for this agenda item, Chairman Wiley moved back to agenda item "Unfinished Business."

Agenda Item - Unfinished Business

There being no discussion regarding Agenda Item "Unfinished Business," Chairman Wiley moved to the next scheduled Agenda Item.

Agenda Item – (New Business) #1: Minutes of the April 8, 2025, Board of Trustee Meeting

Dispensing with a reading of the minutes, Chairman **Wiley** asked the Board for comments regarding the monthly meeting minutes of April 8, 2025, contained in KSD Board of Trustees packet of May 6, 2025, Attachment #2.

District Manager Gallant submitted the following correction:

• Page 6 of 9, Item **(Other Business)** #7: 3rd paragraph from the bottom, line 6: "combinations of bonds and bands" should read "combinations of bonds and B.A.N.s (Bond Anticipation Note)"

There being no further corrections, revisions, or additions to come before the Board regarding the monthly meeting minutes of April 8, 2025, Chairman **Wiley** asked for a motion.

A motion was made to approve the minutes for the April 8, 2025, Monthly Meeting as amended.

MOVED: Wise SECONDED: Brady DISCUSSION: None. MODS: As Noted.

VOTE: Chairman Wiley, affirmative

Vice Chairman Wise, affirmative Treasurer Brockway, affirmative

Clerk **Brady**, **affirmative** Trustee **Nalezny**, **affirmative**

5 in favor, 0 opposed; the motion carried.

Chairman Wiley moved to the next agenda item.

Agenda Item – (New Business) #3: Western Ave. Construction Update

Referring to Attachment #3 (Western Ave. Slides) and Attachment #1 (Agenda Item Commentary) of the May 6, 2025, Trustees Packet, Project Manager **Johnson** provided an update (along with a slide show) of the Western Ave. construction project. His presentation included the following topics and highlights:

- N. M. Curtis Earth Works INC. Berwick, ME began work on the project April 14, 2025, and completed the sewer portion of the project on April 30, 2025.
- Dayton Sand and Gravel, Dayton ME is scheduled to begin roadway grading on May 19, 2025.
- Project completion and roadway opening is expected to be Memorial Day weekend.
- Ledge was encountered and removed at Lobster Lane in front of River Tree Arts.
- New manholes were installed at all locations replacing the old ones.
- Pipe was upsized from 8 inch to 10 inch in various locations.
- During construction some unauthorized sump pump hookups were discovered and noted.
- Cleanouts were installed at all services.
- Various stubs were installed for future use.
- The term "Box Cut" was defined as it applies to roadway construction.
- N. M. Curtis Earth Works INC. will provide a separate bill for the gravel fill used in the Box Cut process.
- The slide show depicted various connection points, the ledge by Lobster Lane, and setting of manholes.

There being no further remarks or comments to come before the Board regarding this issue, Chairman Wiley moved to the next agenda item.

Agenda Item – (Other Business) #4: Manager's Report

District Manager **Gallant** and Project Manager **Johnson** provided a summary of selected items from the Manager's Report as detailed in Attachment #4 (Manager's Report for May 2025), of the May 6, 2025, Trustees Packet. Their comments included the following topics and highlights:

FINANCIAL AND ADMINISTRATIVE

Personnel

No change

COLLECTION SYSTEMS

Update From Collection System Foreman (Danny Boissonneault)

- Performed dig safes, service inspections, weekly pump station inspections and completing work orders.
- Jetting various lines at the beach area in preparation for sewer line replacement.
- Lowering the manholes (27) on York Street in preparation for MDOT (Maine Department of Transportation) paving to commence on June 16, 2025.

PLANT OPERATIONS

Update From Lead Operator (Ty Morin)

- Process control continues to stay in check.
- Completed monthly work orders.
- Spring clean-up is still in progress.
- Staff has also been working on thorough cleaning in each building.

2022 CAPITAL IMPROVEMENT PROJECTS

Phase 2 WWTP Biological Design

• The final review with Brown and Caldwell, Andover, MA was held on May 2, 2025.

2024 CAPITAL IMPROVEMENT PROJECTS

Investigation and Spot Repairs in Collection System

• N.M. Curtis Earth Works INC. Berwick, ME, is scheduled to install the manhole replacement for Wallace Ave on May 8, 2025.

2025 CAPITAL IMPROVEMENT PROJECTS

Investigation and Spot Repairs in Collection System

 Zoom Drain of New England, Scarborough, ME is scheduled to begin video inspection of clay lines in the beach area on May 8, 2025.

Fieldcrest Pump Station Upgrade

- This project is scheduled to start in mid-June 2025.
- One pump will be installed initially, with the second pump installation scheduled for mid-July 2025.
- Richardson Electrical Company, Seabrook, NH is scheduled to provide the 480 VAC electrical upgrade shortly after pump installation has been completed.

Boothby Road Pump Station Design

• No action since last month.

Mousam Landing Pump Station upgrade

- Staff has started upgrading the electrical panel.
- The first pump is scheduled for installation during the week of May 12, 2025.
- The second pump will be installed two weeks after the first pump installation is complete.

WWFT Improvements

• EII (Electrical Installations, LLC), Moultonboro, NH has ordered parts for the DO (Dissolved Oxygen) probes and is waiting for delivery.

Replace insulation on plant HVAC Ducting

• Tri-State Insulation, Inc. Lewiston ME is scheduled to start the project in mid-June 2025.

Coating of Grit Chamber

• Marston Industrial Services, Inc., Fairfield, ME is scheduled for this project to in the summer of 2025.

Gas Detector and Lights in SST's

• EII (Electrical Installations, LLC), Moultonboro, NH has ordered parts and will schedule installation once they arrive.

Pump Station Charger upgrade

- The PLC (Programmable Logic Controller) backup battery chargers have arrived.
- Staff will install the chargers as time permits.
- The Mousam Landing pump station charger has been installed.

Western Ave Construction

- N. M. Curtis Earth Works INC. Berwick, ME began work on the project April 14, 2025, and completed the sewer portion of the project on April 30, 2025.
- Dayton Sand and Gravel, Dayton ME is scheduled to begin roadway grading on May 19, 2025.

Kennebunk Sewer District Board of Trustees

Meeting Minutes for May 6, 2025

Biological upgrade

• Staff met with Brown & Caldwell representatives on May 2, 2025.

Treasurer **Brockway** asked if the Town of Kennebunk has approved the biological upgrade project. District Manager **Gallant** replied that the town still needs to review the plan and issue a building permit.

Agenda Item – (Other Business) #a: Kennebunk Sewer District Account Balances

Chairman **Wiley** asked if any discussion was needed for KSD Account Balances. Referring to Attachment #5 (Account Balances), of the May 6, 2025, Trustees Packet, District Manager **Gallant** provided the following update:

• The Rate Stabilization Fund (Account # 1509) continues to grow.

There being no further remarks or comments to come before the Board regarding this issue, Chairman Wiley moved to the next agenda item.

Agenda Item – (Adjournment) #5: Adjournment

There being no further business to come before the Board, Chairman Wiley asked for a motion to adjourn.

A motion was made to adjourn the meeting at 8:05 p.m.

MOVED: Wise SECONDED: Brockway DISCUSSION: None. MODS: None.

Date Signed

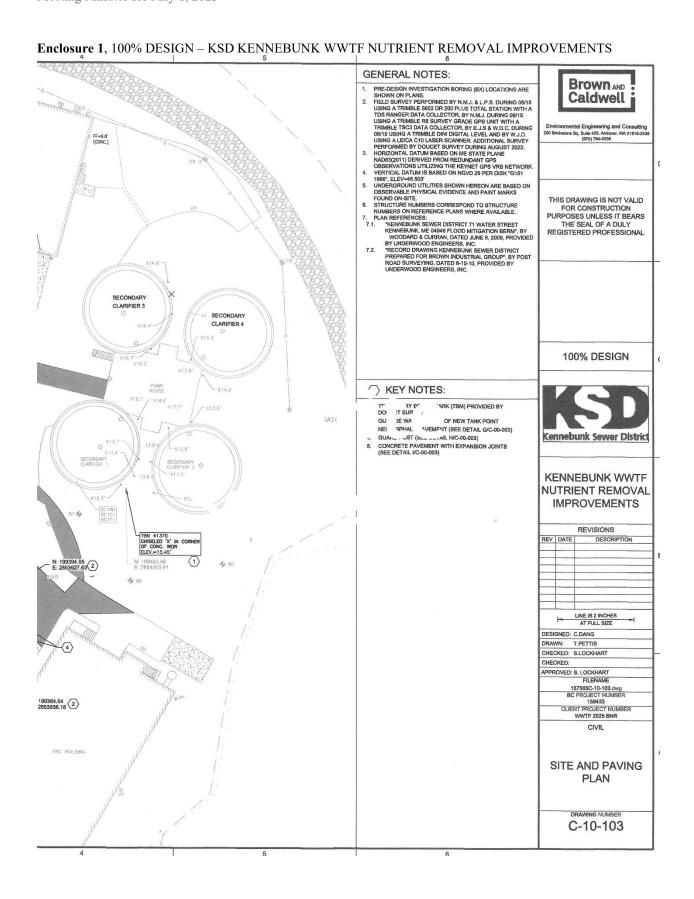
VOTE: Chairman Wiley, affirmative

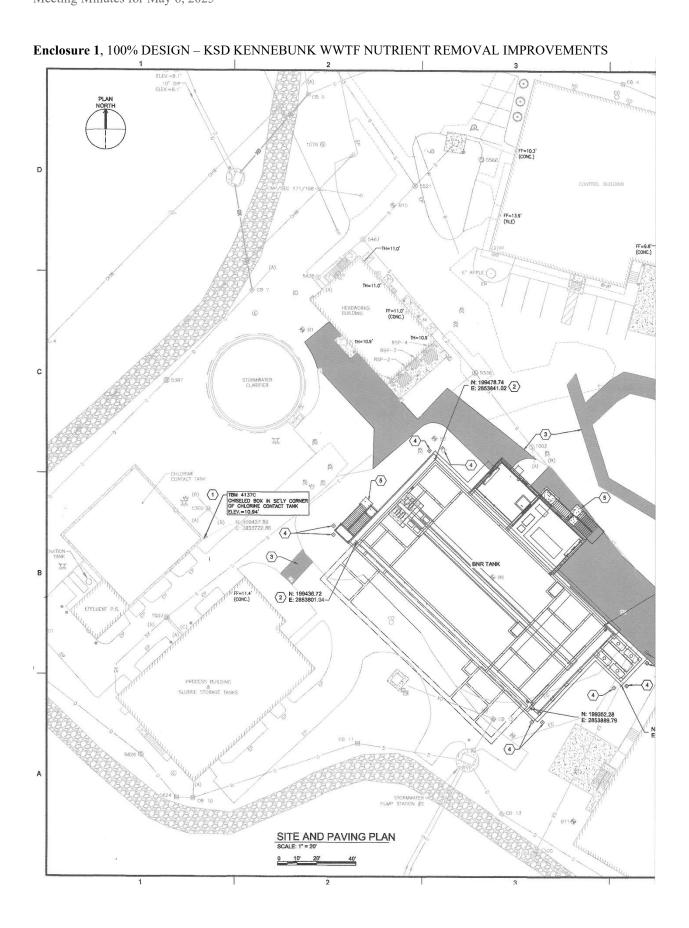
Vice Chairman Wise, affirmative Treasurer Brockway, affirmative

Clerk **Brady**, **affirmative** Trustee **Nalezny**, **affirmative**

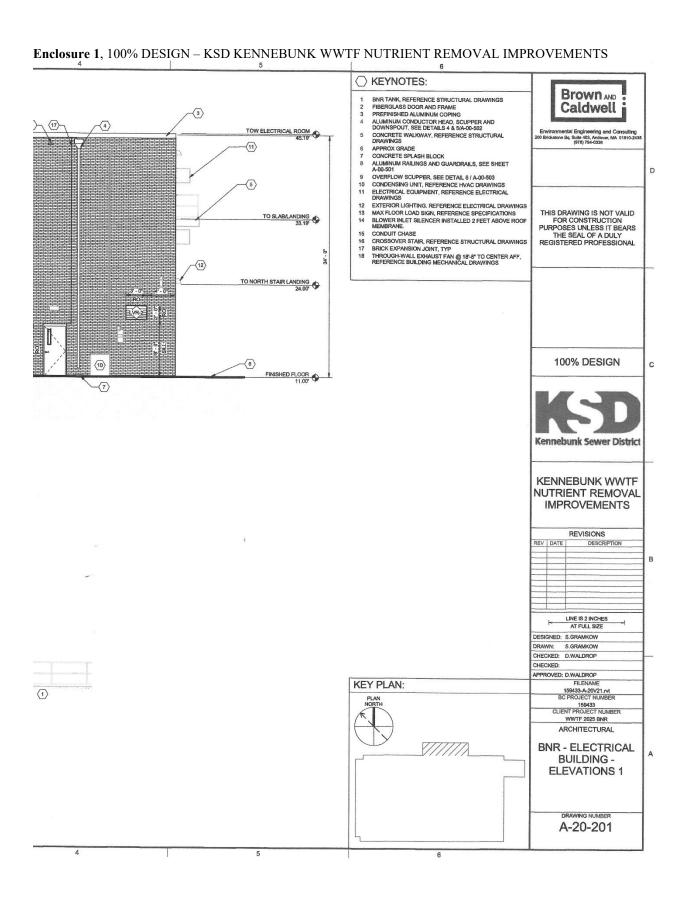
5 in favor, 0 opposed; the motion carried.

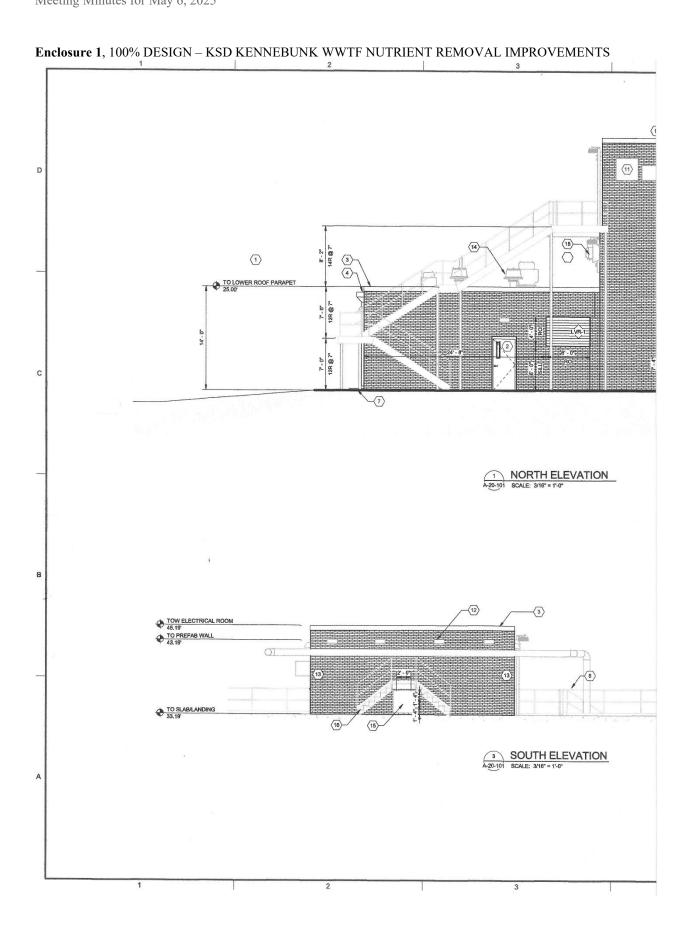
Robert Brady Clerk			
CODELL BEAUTY CHEEK			



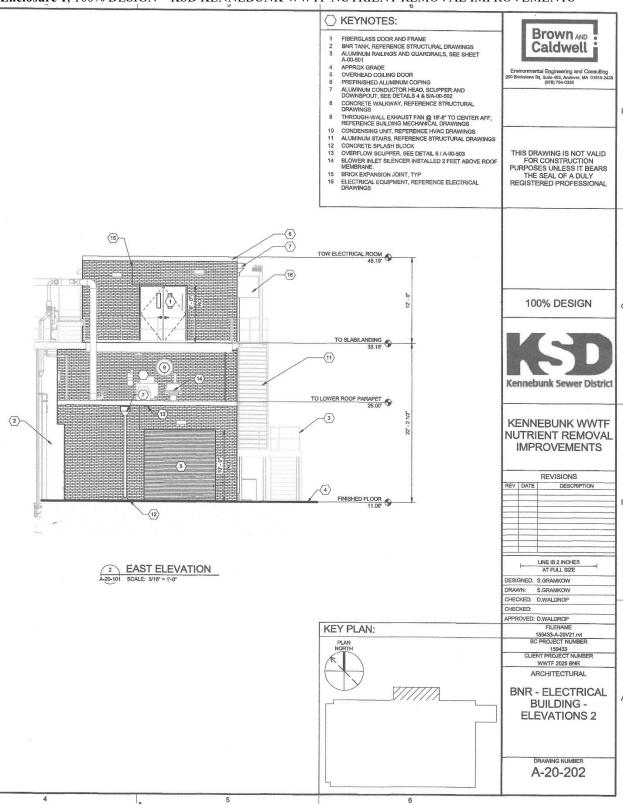


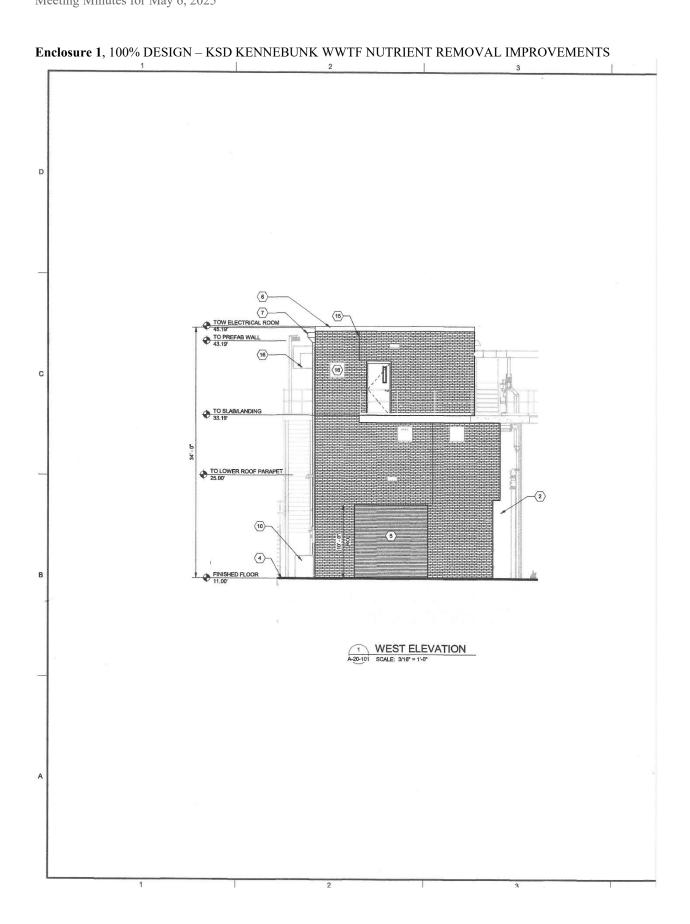
Frederic Trexler, Recording Secretary

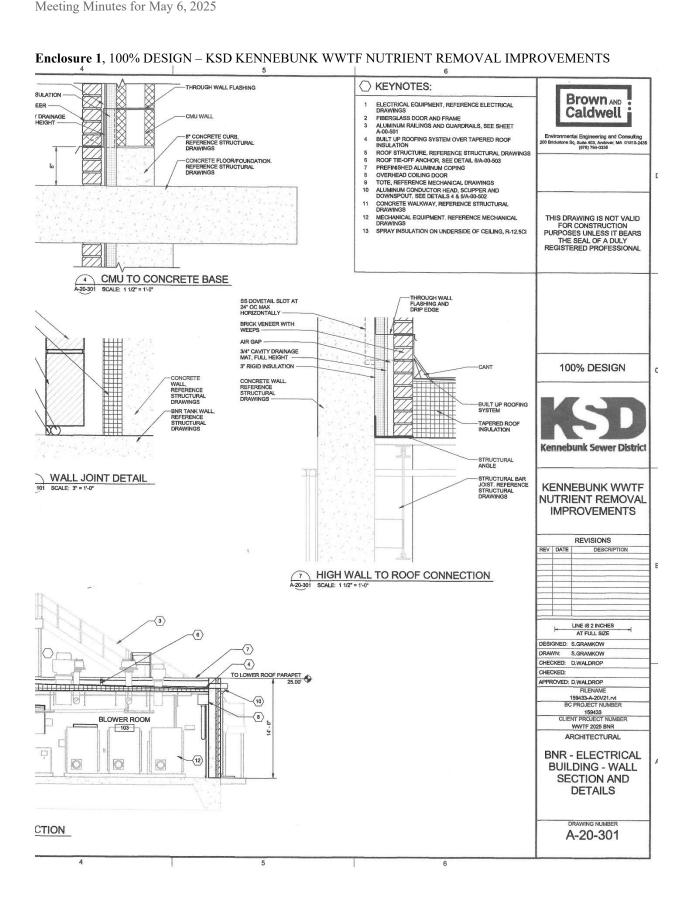


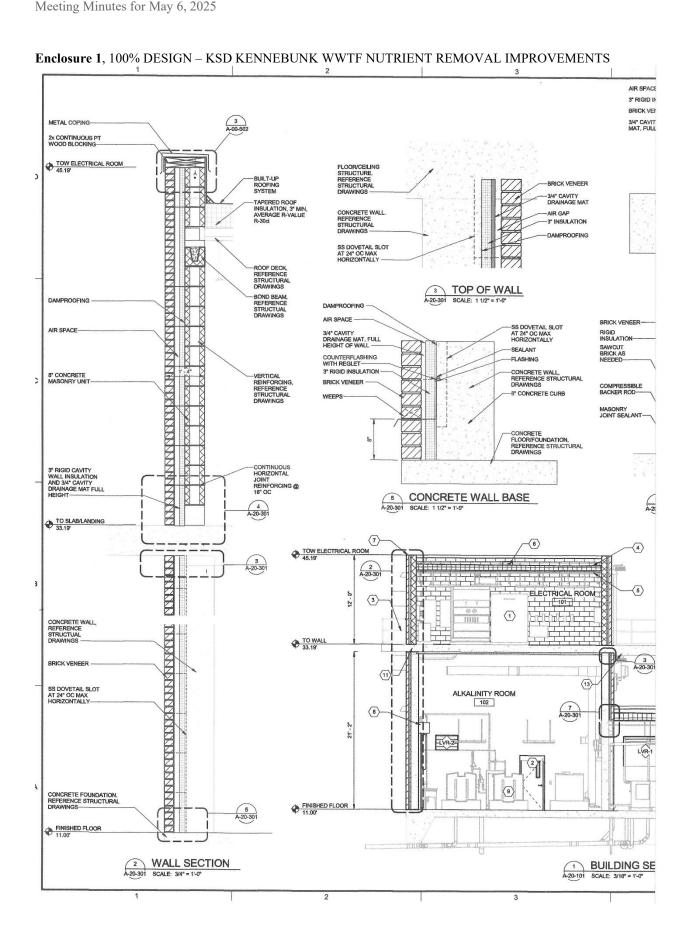


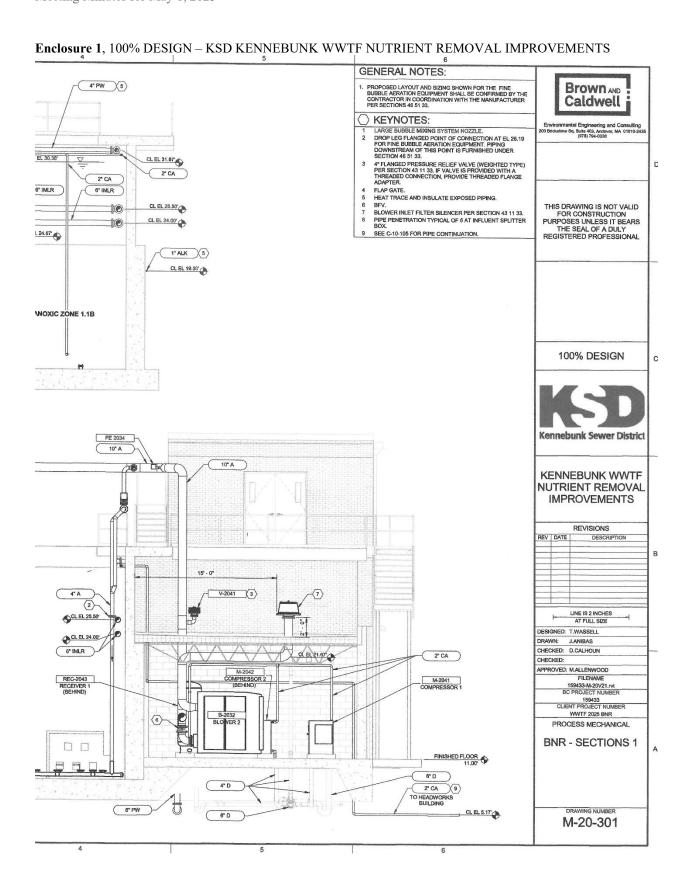
Enclosure 1, 100% DESIGN – KSD KENNEBUNK WWTF NUTRIENT REMOVAL IMPROVEMENTS



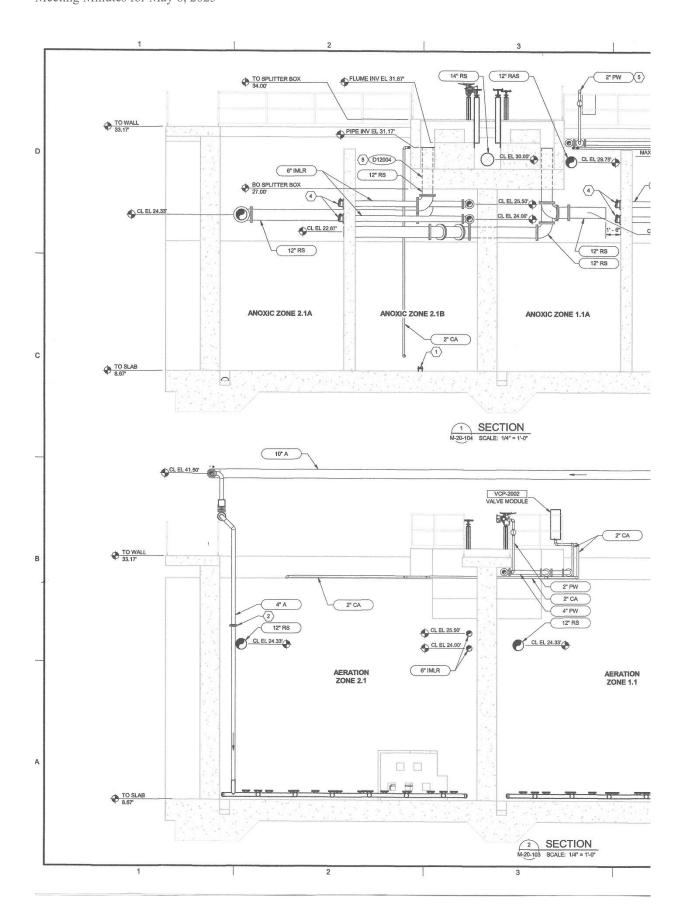






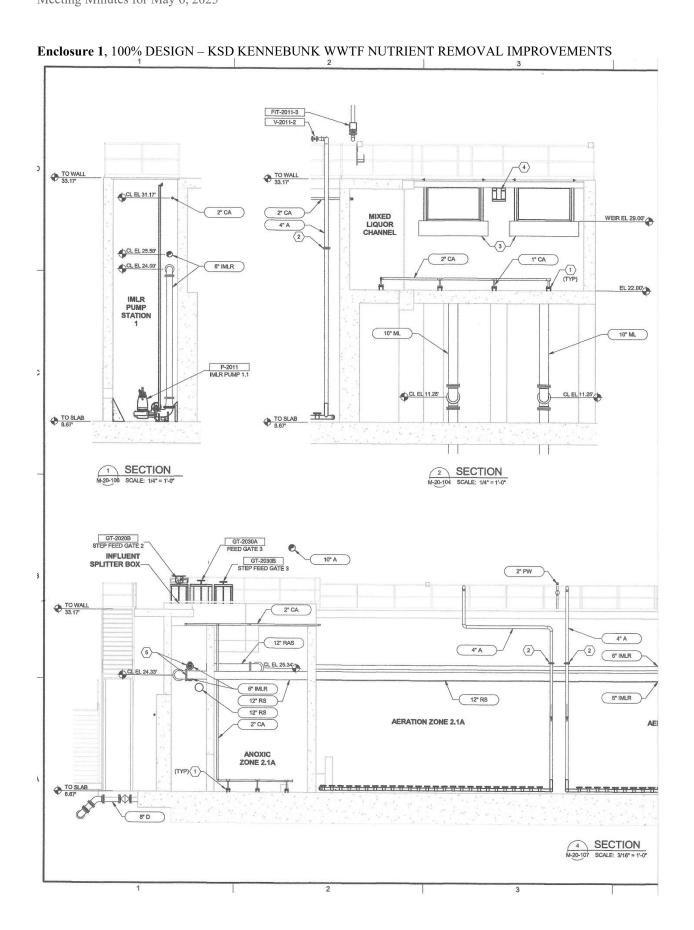


Frederic Trexler, Recording Secretary

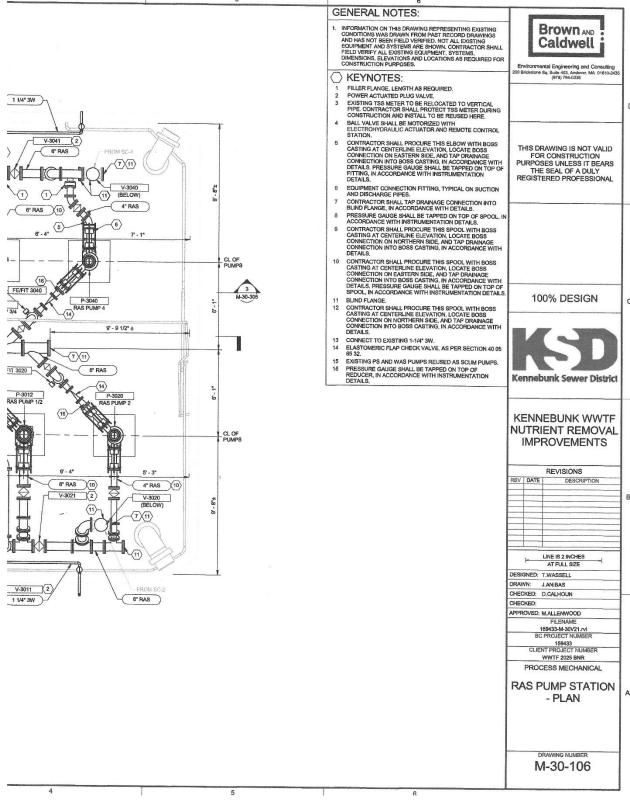


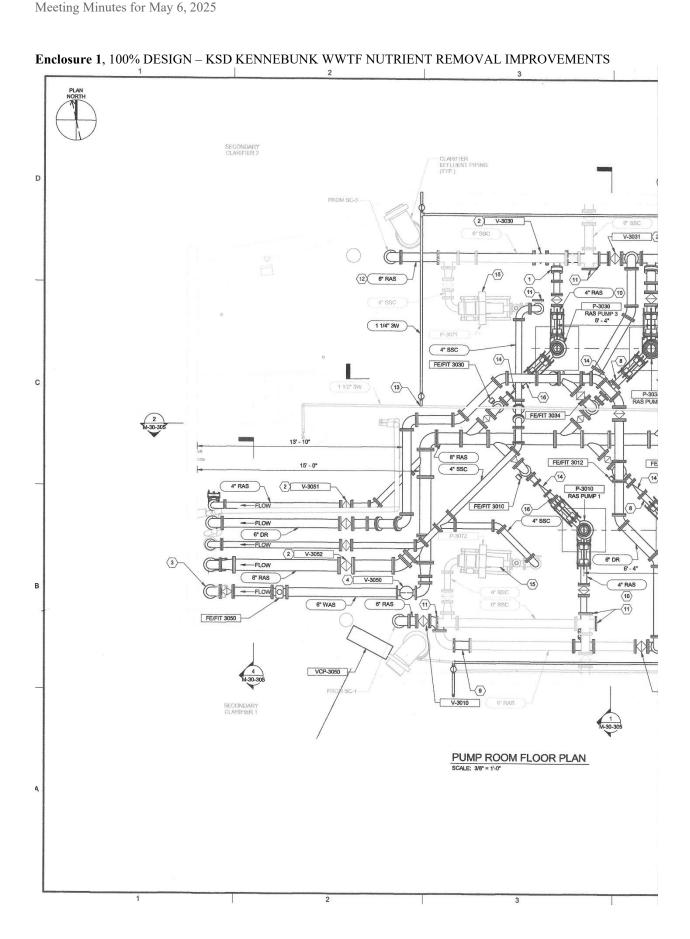
GENERAL NOTES: PROPOSED LAYOUT AND SIZING SHOWN FOR THE FINE BUBBLE AERATION EQUIPMENT SHALL BE CONFIRMED BY THE CONTRACTOR IN COORDINATION WITH THE MANUFACTURER PER SECTIONS 46 51 33. Brown AND Caldwell PROPOSED LAYOUT AND SIZES SHOWN FOR THE LARGE BUBBLE AIR SYSTEM SHALL BE FINALIZED AND CONFIRMED BY CONTRACTOR IN COORDINATION WITH THE EQUIPMENT MANUFACTURER. SPLITTER BOX (7) 2" PW LARGE BUBBLE MIXING SYSTEM NOZZLE.
DROP LEG FLANGED POINT OF CONNECTION AT EL 26.19
FOR FINE BUBBLE AERATION EQUIPMENT. PIPING
DOWNSTREAM OF THIS POINT IS FURNISHED UNDER
SECTION 46 51 33. TO WALL 33.17 (6) WEIR PLATE. SEE DETAIL \$3003. WALL MOUNT DAVIT BASE. WEIR EL 29.00' THIS DRAWING IS NOT VALID FOR CONSTRUCTION PURPOSES UNLESS IT BEARS THE SEAL OF A DULY REGISTERED PROFESSIONAL FLAP GATE. HANDSTOP 2" PIPE OFF 4" PW PIPE WITH BALL VALVE AND HOSE CONNECTION. MIXED ACTUATED PINCH VALVE (TYP.). LIQUOR CHANNEL (TYP) 12" ML 10° ML (8) 100% DESIGN TO SLAB Kennebunk Sewer District 3 SECTION M-20-104 SCALE: 1/4" = 1'-0" KENNEBUNK WWTF NUTRIENT REMOVAL **IMPROVEMENTS** REVISIONS V-2031-2A 1 1/2" SC REV DATE 2º PW 4" PW 1 1/2" SC (3) TO WEIR EL 30.00 LINE IS 2 INCHES AT FULL SIZE (2) MIXED LIQUOR CHANNEL TOP PIPE EL 27.67 DESIGNED: T.WASSELL 2" CA J.ANIBAS CHECKED: D.CALHOUN (TYP) 2" CA APPROVED: M.ALLENWOOD 12" RS VED: M.ALLENWOOD
FILENAME
159433-M-20V21.rvt
BC PROJECT NUMBER
159433
CLIENT PROJECT NUMBER
WWTF 2025 BNR AERATION ZONE 2.2 IATION ZONE 2.1B ANOXIC ZONE 2.2A PIPE INV EL 12.67 PROCESS MECHANICAL **BNR - SECTIONS 2** DRAWING NUMBER M-20-302

Enclosure 1, 100% DESIGN - KSD KENNEBUNK WWTF NUTRIENT REMOVAL IMPROVEMENTS



Enclosure 1, 100% DESIGN – KSD KENNEBUNK WWTF NUTRIENT REMOVAL IMPROVEMENTS





KSD Board of Trustees Monthly Meeting Action Items History List

Request Date	Action Item
April 8, 2025	Agenda Item # 1: Topic Solar Energy Options. Description: Explore options for a solar energy installation at the administration building, 44 Water Street.
Date	Agenda Item #: Topic Description