

# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

## CONTRACT DOCUMENTS

for

### PROJECT

## Pikes Bay Sanitary District #1 (PBSD)

Lower Lift Station (LS) – Force Main (FM) Project

Bid Date: DEC 16<sup>th</sup>, 2022 1:00pm

### OWNER

**Pikes Bay Sanitary District #1 (PBSD)**

Nov 17, 2022

### ENGINEER

**LUND ENGINEERING**

**Washburn WI 54891**





## Lower Lift Station (LS) – Force Main (FM) Project

**DOCUMENT FILE:**

- SCOPE.DOC  
BIDAD.DOC  
BIDINST.DOC  
BIDPROOF.DOC  
OWNERINS.DOC  
SUBLIST.DOC  
WAGE.DOC  
NONCOLL.DOC  
AFFIDAVI.DOC

A. Bidding Proposal and Schedule	<b>PROPOSAL.DOC</b>
B. Supplemental Conditions	<b>SUPPCOND.DOC</b>
C. Standard Form of Agreement (Owner and Contractor)	<b>AGREEEJCDC.DOC</b>
D. Bid Bond	
E. Notice of Award	
F. Construction Performance Bond	
G. Construction Payment Bond	
H. Notice to Proceed	
I. Application for Payment	
J. Change Order	
K. Certificate of Substantial Completion	
L. Standard General Conditions (EJCDC by Reference, 2013 edition, pages 1-58)	
M. Contractor's Affidavit of Debits and Claims	<b>DEBITS.DOC</b>
N. Contractor's Affidavit of Release of Liens	<b>RELIE.N.DOC</b>

A. Project Work	<b>APROJWRK.DOC</b>
B. Reference Specifications	<b>BTECH.DOC</b>
C. Standards	<b>CTECH.DOC</b>
D. Details	<b>DDTAIL.DOC</b>
E. Permits	<b>EPERMIT.DOC</b>
F. Manholes / Catch-basins	<b>FMANHOLE.DOC</b>
G. Watermain (N/A)	<b>GWATER.DOC</b>
H. Sanitary Sewer	<b>HSAN.DOC</b>
I. Roadway	<b>IROAD.DOC</b>
J. Soil Borings	<b>JSOILSB.DOC</b>



# LUND ENGINEERING

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## Lower Lift Station (LS) – Force Main (FM) Project

### PROJECT SPECIFICATIONS

## SECTION I      BIDDING INFORMATION



# LUND ENGINEERING

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## Pikes Bay Sanitary District #1 (PBSD)

Lower Lift Station (LS) – Force Main (FM) Project

### PROJECT SCOPE

The project involves:

- A. FURNISH & INSTALL (F&I); 6” HDPE (200 psi) DR-11 IPS;  
OR PVC (250 psi) 6” SDR17 Ring-Tite IPS; Force Main (FM).
- B. F&I; Manhole 5’ Dia. w/ 18” sump & set 2’ above existing grade.
- C. F&I; CRUSHED AGGREGATE BASE COURSE; for roadway restoration.
- D. F&I; Erosion Control & Restoration
- E. F&I; Pavement replacement, in kind..
- F. F&I; 6” Gate Valve & 2” Ball Valve bleeder inside 5’ MH.
- G. F&I Air / Vacuum Valves, inside 5’ MH.
- H. F&I Culvert Extension 36” w/ Rip Rap (including HR fabric under-liner)
- I. F&I; All other items as listed in the bid proposal schedule, or required by the Specifications.

A bid bond of 5% is required.

Award is expected within 45 days of the bid opening.

The following Standard Specifications shall be used for this Project:

- 1. Standard Specifications for Sewer and Water Construction in Wisconsin, 6th Edition, with Addenda #1 & #2 (and subsequent revisions)
- 2. WI DOT Standard Specifications 2022 Edition.
- 3. WI Construction Site Best Management Practices, and WI DNR Technical Specifications.

The following WI Administrative Codes shall be adhered to, for this Project:

- 1. WI DWD
- 2. WI DNR
- 3. WI TRANS

All state, local, and federal laws shall be adhered to, for this Project.

The Plans and these Specification are the Contract Documents, along with all Reference Specifications.



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

DATE: Oct. 27, 2022

TO: PBSB

FR: Randy M. Lund, PE

RE: Lower Lift Station (LS) – Force Main (FM) Project – Advertisement for Bid.

**For a DEC. 16<sup>th</sup> 2022 Bid Opening**

**We have to publish at least 7 and 14 days prior, or DEC. 02<sup>nd</sup> and DEC. 9<sup>th</sup>.**

**Legal ad's for Ashland Daily Press are usually on Thursdays.**

**So Publish on DEC 01<sup>st</sup> and DEC. 8<sup>th</sup>.**

## ADVERTISEMENT FOR BIDS

Owner: Pikes Bay Sanitary District #1

Project: Lower Lift Station (LS) – Force Main (FM) Project

Engineer: Lund Engineering, Randy M. Lund, PE 415 E 3<sup>rd</sup> St. / PO Box 243 Washburn WI 54891  
[rmlund1@charter.net](mailto:rmlund1@charter.net) 715-209-0367

Notice is hereby given that sealed bids will be received by the Pikes Bay Sanitary District #1; from **12:00 pm until 1:00 pm, on DEC. 16<sup>th</sup>, 2022**, at the Bayfield Town Hall located at 85450 CTH J. The Bids will be publicly opened and read aloud at **2:00 pm**, for the furnishing of all labor and material for the construction of the Lower Lift Station (LS) – Force Main (FM) Project. **Bids must be submitted by 1:00 pm DEC 16<sup>th</sup>**.

Bids can also be mailed to the Pikes Bay Sanitary District #1, PO Box 689 Bayfield WI 54814, and shall be marked “Sealed Bid – Lower Lift Station (LS) – Force Main (FM) Project”.

Bids can be dropped off at Lund Engineering, prior to **11:00 am DEC 16<sup>th</sup>** and SHALL be sealed and marked “Sealed Bid”.

Bids can be sent electronically to Lund Engineering and the PBSB clerk; within a password protected pdf file. The password must only be sent to the PBSB clerk, Rose ([clerk@pbsdwi.com](mailto:clerk@pbsdwi.com)) or Randy M. Lund, PE ([rmlund1@charter.net](mailto:rmlund1@charter.net)) after **1:00 pm on DEC 16<sup>th</sup>**; in a separate email. The password can be sent by text or be given by a phone call.

The Lower Lift Station (LS) – Force Main (FM) Project includes, but is not limited to, the following types of work: 6” Force Main, Air Valves, Manholes, gravel & asphalt road repair, erosion control, and site restoration. Force main length – 2050 feet.

Plans and Specifications in paper or PDF format, may be obtained from Lund Engineering, Washburn, WI; on or after DEC 01<sup>st</sup>, 2022. Hardcopies require a non-refundable fee of \$50.

The project engineer contact is Randy M. Lund, PE.



# LUND ENGINEERING

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Requests for bidding documents must include: street address for delivery, email address, and telephone numbers for bidder's contacts.

Bid security in the amount of five (5%) percent of the bid must accompany each bid in accordance with the Instructions to Bidders.

The Pikes Bay Sanitary District #1 reserves the right to reject any, and all bids, or to accept any bid deemed to be in their best interest, and may waive any minor informalities, in the bidding process. All bidders accept the process outlined in the bidding instructions in submitting a bid.

This project will be funded by Pikes Bay Sanitary District #1.

Submitted,

AJ. Long, President; Pikes Bay Sanitary District #1

Published: Ashland Daily Press as a Class 2 notice – \_\_\_\_\_



# LUND ENGINEERING

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## **Pikes Bay Sanitary District #1 (PBSD)** **Lower Lift Station (LS) – Force Main (FM) Project**

### **INSTRUCTIONS TO BIDDERS**

#### **2.01 PROPOSALS**

The bidder must submit their proposal on the forms furnished and attached herein. The bidder shall specify unit prices or a lump sum price as indicated for each of the separate items called for on the proposal form; and the grand total for which they will perform all the work specified. All writing shall be done in ink. No proposal will be considered which is not made out on forms furnished.

#### **2.2 BID GUARANTEE**

A bid bond, certified check, cashiers check, bank check, or bank money order (**but not a personal or company check**) shall accompany each bid, payable to the Owner in an amount not less than five (5) percent of the total bid, as a guarantee that if the bid is accepted, the bidder will execute and file the proposed contract, performance and payment bonds, and required insurance within ten (10) working days after being notified of the acceptance of his bid. If the successful bidder so files the contract, bonds, and insurance, the bid guarantee will be returned to them. If the successful bidder fails to file such contract, bonds, and insurance, the amount of the guarantee shall be forfeited to the Owner. The bid guarantees of all except the apparent successful and first runner up bidders will be refunded after the opening of the bids. The balance of the bid guarantees will be refunded after the successful bidder has filed the contract, bonds, and insurance, and obtained Owner approval.

#### **2.03 REQUIREMENTS FOR SIGNING PROPOSALS**

- a. The full name and business address of each bidder must be entered on any and all proposals submitted. Each proposal shall be signed in the space provided therefore by written signature of the person or persons properly authorized to sign.
- b. A proposal submitted by an individual shall be signed by the individual or by an authorized agent of same.
- c. A proposal submitted by a firm or partnership shall be signed by a member or an authorized agent thereof. If by joint ownership, the proposal shall be signed by each owner or their authorized agent(s).



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- d. A proposal which is signed by and attorney-in-fact for individuals, firms, partnerships or joint ownership shall have attached thereto a power-of-attorney evidencing authority to sign the proposal.
- e. A proposal submitted by a corporation shall be signed by an authorized officer or agent of such corporation. Such corporation must be licensed to do business in the State of Wisconsin before a proposal to do the work can be received. If a foreign corporation, the State under which it is incorporated must be named.

## 2.04 SUBMISSION OF PROPOSALS

- a. The following documentation shall be placed in an envelope or in separate envelopes which shall be sealed:
  - 1. The Proposal(s) and Proposal Schedule
  - 2. The Bid Guarantee (see paragraph 2.02)
  - 3. List of Subcontractors (see paragraph 2.16)
  - 4. Affidavit on Non-Collusion (see paragraph 2.17)
  - 5. Affidavit of Organization and Authority (see paragraph 2.18)
- b. On the envelope or envelopes shall be plainly written:
  - 1. Contract number
  - 2. Contract title or name
  - 3. Name of Bidder
  - 4. Date of bid opening
- c. Such envelope(s) shall be addressed and delivered to the Owner before the time for bid opening as specified in the Advertisement for Bids.

## 2.05 WITHDRAWAL OF PROPOSALS

Any bidder may withdraw his/her proposal(s) at any time prior to the scheduled time for the receipt of proposals, provided the request is in writing and is in the hands of the Owner or Engineer by the time set for opening proposals.

## 2.06 REJECTION OF PROPOSAL

The Owner reserves the right to reject any and all proposals, to waive any informalities and irregularities in bidding and to accept any proposal deemed in the best interests of the Owner.



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## 2.07 CONTRACT DOCUMENTS

All documents comprising this contract are available at the offices of the Owner and Engineer, and are open to inspection by bidders.

## 2.08 INTERPRETATION OF CONTRACT DOCUMENTS

Should any question arise concerning the true meaning of any part of the contract documents, the bidder may submit to the Engineer a written request for an interpretation thereof. An interpretation so requested will be made in the form of an addendum and either mailed or delivered to all bidders who have received contract documents. Any addenda issued during the time of bidding shall be included with the proposal and will become part of the final contract.

## 2.09 OMISSION AND DISCREPANCIES

Bidders shall immediately report any omissions, errors or discrepancies in the plans or specifications to the Engineer who may issue an addendum as per section 2.08.

## 2.10 EXAMINATION OF SITE AND CONTRACT DOCUMENTS

Bidders are required to examine carefully the site of the work (if applicable), the general conditions, supplemental conditions, technical specifications, special provisions, agreement forms, these instructions, the plans and any other contract documents for the work specified. The submission of a proposal shall be considered conclusive evidence that the bidder has made such an examination and is satisfied as to all the conditions, contingencies, provisions, and requirements of the contract documents.

## 2.11 QUANTITIES

- a. The estimated quantities of materials and work are the result of careful calculations but are not to be considered as final, and will be used primarily as a basis for determining the successful bidder. After the contract is awarded, the quantity of materials and work listed may be increased or decreased in an amount not to exceed 15% at the discretion of the Engineer, without in any way invalidating unit bid prices. This is pursuant to Chapter 62.15 -1c, Wisconsin Statutes.
- b. The quantities upon which payment will be made to the Contractor are to be determined by measurements of the actual materials used and work performed by the Contractor, as directed by the Engineer.



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## 2.12 AWARD OF CONTRACT

The Contract shall be deemed awarded when a written "Notice of Award" is postmarked to the address of the bidder given in the proposal affidavit.

## 2.13 EXECUTION OF CONTRACT

a. Within ten (10) working days from receipt of the written "Notice of Award", the successful bidder is required to submit:

1. Three (3) executed copies of the contract.
2. Certificate(s) of Insurance (see Contractors Insurance).

b. The contract documents shall be delivered to the Owner or Engineer. Such contract when signed by the Owner; countersigned by the Owner; approved as to form and execution by the Owners Attorney; and certified as to adequate financial provisions by the Owner shall be a part of the contract documents.

c. In case of failure to deliver such contract documents within the said 10 days, or such extension thereto as the Owner may deem reasonable, the bidder will thereupon be considered in default to the Owner to the full amount of his bid guarantee.

## 2.14 NOTICE TO PROCEED

No work shall be started under the contract prior to the date named in the Owners written "Notice to Proceed" with the work.

## 2.15 TIME OF COMPLETION

a. Time of completion is an ESSENTIAL CONDITION of the Contract. The Contractor shall work regularly, diligently, and uninterruptedly at such a rate of progress that will insure full completion of the Contract within the Contract Time specified.

b. It is expressly understood and agreed, by and between the Contractor and Owner, that the contract time for completion of the work described herein is a reasonable time for the completion of same.

c. For every calendar day of delay in completion of the work beyond the contract time, unless extended in writing by the Owner, there shall be deducted from the amount due the Contractor the sum indicated in the Supplemental Conditions, per calendar day as liquidated damages.



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## 2.16 SUBCONTRACTORS

a. The Contractor shall, at the time of making his proposal and as a part of his proposal, submit a list of all subcontractors with whom they propose to contract. Such list shall not be added to, nor altered, without the written consent of the Owner. The Owner reserves the right to approve any and all subcontractors, and no subcontractor shall be allowed to do work unless they are listed in the Contractor's proposal or in a subsequent written, Owner approved change order.

b. The Contractor shall not under any circumstances be relieved of his liabilities and obligations. All transactions of the Owner shall be with the Contractor. Subcontractors shall be recognized only in such capacity.

## 2.17 AFFIDAVIT OF NON-COLLUSION

All proposals completed shall be accompanied by a bidder "Affidavit of Non-Collusion". A copy of the form is contained in the Contract and Agreement Forms section.

## 2.18 AFFIDAVIT OF ORGANIZATION AND AUTHORITY

All proposals completed shall be accompanied by a bidder "Affidavit of Organization and Authority". A copy of the form is contained in the Contract and Agreement Forms section. **2.19**

## 2.19 BIDDERS PROOF OF RESPONSIBILITY

Bidders must have on file with the Owner completed proof of responsibility forms prior to the opening of proposals. A copy of a sample form is contained in the Contract and Agreement forms section. A local form(s) indicating essentially the same information may be substituted.

**NOTE: This submission is needed only once a calendar year.**

## 2.20 PERFORMANCE AND PAYMENT BONDS

The Contractor who is awarded the contract shall furnish a surety bond with a company licensed to do business in the State, and approved by the Owner, in an amount at least equal to 100 percent of the contract price as security for the faithful performance of this contract, for the payment of all persons performing labor and furnishing materials in connection with this contract, and for the satisfactory repair or replacement for any portion of the work becoming defective during guarantee period.



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## 2.21 NONRESIDENT DEPOSIT

The Contractor shall meet State Law for deposits by non-resident Contractors.

## 2.22 WAGE RATES

Wage Rates apply if incorporated into this specification or if referenced in other sections of this specification.

PBSD expects to Fund the Project with PBSD monies.

The State of WI has repealed State Law regarding Prevailing Wages.

If Federal Funds are utilized, then compliance with the US Federal Davis-Bacon Wage Rates would be required.

An allowance for US Federal Wage Rates is to be submitted as part of the Bid for this Project.

**The Bid acceptance May or May NOT, be based on the inclusion of the Wage Rate allowance item.**



# LUND ENGINEERING

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## BIDDER'S PROOF OF RESPONSIBILITY

There is submitted herewith for your consideration, a statement of qualifications of the undersigned to furnish the necessary labor, materials and skills required to enter upon and complete public works contracts to be let by the **Pikes Bay Sanitary District #1 (PBSD)** . (Need not be submitted; if previously furnished in the current calendar year.)

## STATEMENT OF BIDDER'S QUALIFICATIONS

1. Name of Bidder \_\_\_\_\_
2. Bidder's Address \_\_\_\_\_ Phone \_\_\_\_\_
3. When organized \_\_\_\_\_ If incorporated, in what State \_\_\_\_\_
4. How many years have you been engaged in the contracting business under the present firm name: \_\_\_\_\_
5. General character of work performed by your firm:  
\_\_\_\_\_  
\_\_\_\_\_
6. Have you ever failed to complete any work awarded to you? Yes\_\_\_ No\_\_\_
7. Have you ever defaulted on a contract? Yes\_\_\_ No\_\_\_
8. Attach a list of major contracts completed by your firm, including kind of work and the approximate cost.  
\_\_\_\_\_  
\_\_\_\_\_
9. Attach a list of your major equipment.  
\_\_\_\_\_  
\_\_\_\_\_
10. Attach a statement of background and experience of the principal members of your \_\_\_\_\_ personnel.
11. Bonding company (name & address)  
\_\_\_\_\_  
\_\_\_\_\_
12. Itemize your current assets as of latest balance sheet.  
\_\_\_\_\_  
\_\_\_\_\_
13. Itemize your current liabilities as of latest balance sheet.  
\_\_\_\_\_  
\_\_\_\_\_
14. Project: **Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

## Lower Lift Station (LS) – Force Main (FM) Project

### **3:100 CONTRACTORS INSURANCE**

The Contractor shall Not commence work under this contract until; they have obtained all insurance required under this paragraph, and such insurance has been approved by the Owner, nor shall the Contractor allow any subcontractor to commence work on his sub-contract until all similar insurance required of the sub-contract has been so obtained and approved.

The Contractor shall carry “Public Liability Insurance” coverage to insure the Owner against claims arising out of the negligence of the Contractor.

The Contractor shall file a “Certificate of Insurance” with the Owner prior to contract award.



## 3:100 CONTRACTORS INSURANCE (cont.)

### a) Worker's Compensation Insurance -

The Contractor shall take out and maintain during the life of this contract Workman's Compensation insurance for all of his employees employed at the site of the project and in case work is subcontracted, the Contractor shall require the sub-contractor similarly to provide Workman's Compensation insurance for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this contract at the site of the project is not protected under the Workman's Compensation statute the Contractor shall provide and shall cause each sub-contractor to provide adequate insurance for the protection of his employees not otherwise protected.

### b) Bodily Injury and Property Damage Liability Insurance -

The Contractor shall maintain during the life of this contract such Bodily Injury and Property Damage Liability insurance as shall protect him, the Owner, their engineer, and any and all sub-contractors performing work covered by this contract, from claims for damages for personal injury, including accidental death, as well as for claims for property damage, which may arise from operation under this contract, whether such operation be by the contractor, the subcontractor(s) or either of them.

The amount of such insurance shall be as follows:

#### **GENERAL LIABILITY:**

Bodily Injury Liability Insurance: \$1,000,000 each occurrence.

Property Damage Liability Insurance: \$500,000 each occurrence.

#### **MOTOR VEHICLE LIABILITY:**

Bodily Injury Liability Insurance: \$1,000,000 each occurrence.

Property Damage Liability Insurance: \$500,000 each occurrence.

The contractor shall require sub-contractors, if any, not protected under the contractor's insurance policies to maintain insurance as stated above.



**Randy M. Lund, PE** (WI, MN, MI, IL, IA)

## Lower Lift Station (LS) – Force Main (FM) Project

## Address

[illegible]



# LUND ENGINEERING

**Randy M. Lund, PE** (WI, MN, MI, IL, IA)

## Lower Lift Station (LS) – Force Main (FM) Project

### PROJECT SPECIFICATIONS

### WAGE RATES

Wage Rates apply as specified by State & Federal Law and / or by inclusion of a Wage Rate Determination.

A Wage Rate Determination DOES NOT APPLY TO THIS PROJECT.

Unless, Federal monies are utilized, which is NOT Expected.

An Allowance is to be included for compliance with Federal Wage Rates per Davis-Bacon.



# LUND ENGINEERING

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## Pikes Bay Sanitary District #1 (PBSD)

### AFFIDAVIT OF NON-COLLUSION

STATE OF Wisconsin \_\_\_\_\_,

S.S. COUNTY OF \_\_\_\_\_,

**PROJECT:** Lower Lift Station (LS) – Force Main (FM) Project

I hereby swear (or affirm) under the penalty of perjury:

- 1) That I am the bidder (if the bidder is an individual), a partner with the bidder (if the bidder is a partnership) or an officer or employee of the bidding corporation having authority to sign on their behalf (if the bidder is a corporation);
- 2) That the attached bid or bids have been arrived at by the bidder individually and have been submitted without collusion with, and without any agreement, understanding or planned common course of action with any other vendor of materials, supplies, equipment or services described in the advertisement for bids designed to limit individual bidding or competition;
- 3) That the contents of the bid or bids have not been communicated by the bidder or its employees or agents to any person not an employee or agent of the bidder or its surety on any bond furnished with the bid or bids, and will not be communicated to any such person, prior to any official opening of the bid or bids; and

4) That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Subscribed and sworn to before me

this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

(Signature)

Notary: State of Michigan

Commission expires: \_\_\_\_\_ -

\_\_\_\_\_  
(Print Name)

(Title)

\_\_\_\_\_  
(Firm making bid)



# LUND ENGINEERING

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Project:  
**Pikes Bay Sanitary District #1 (PBSD)**  
Lower Lift Station (LS) – Force Main (FM) Project  
**(Bayfield County)**

## AFFIDAVIT OF ORGANIZATION AND AUTHORITY

State of Wisconsin; ss.

\_\_\_\_\_ being first duly sworn on oath depose and says that the bidder on the attached bid proposal is organized as indicated below and that all statements herein made are made on behalf of such bidder and that this deponent is authorized to make them.

(Fill out applicable paragraph)

### 1. CORPORATION

The bidder is a corporation organized and existing under the laws of the State of \_\_\_\_\_, its secretary is \_\_\_\_\_, and does have a corporate seal. The present is authorized to sign construction contracts and bids for the company, a certified copy of which is hereto attached. (Strike out this last sentence if not applicable).

### 2. PARTNERSHIP

The bidder is a partnership consisting of \_\_\_\_\_ and partners doing business under the name of \_\_\_\_\_

### 3. SOLE TRADER

The bidder is an individual and if operating under a trade name, such trade name is as follows:

\_\_\_\_\_.

### 4. ADDRESS

The business address of the bidder is as follows: \_\_\_\_\_

Its phone number is \_\_\_\_\_

### 5. STATUTORY SWORN STATEMENT

\_\_\_\_\_ also deposes and says that he has examined and carefully prepared their bid proposal from the plan and specifications and has checked the same in detail before submitting this proposal or bid, that the statements contained herein are true and correct.

\_\_\_\_\_ (Signature)  
Subscribed and sworn to before me this \_\_\_\_ day of \_\_\_\_\_ 20\_\_.

Notary public, \_\_\_\_\_ Co.  
My commission Expires: \_\_\_\_\_  
(This affidavit must be attached to and filed with the bid proposal)



Lower Lift Station (LS) – Force Main (FM) Project

PROJECT SPECIFICATIONS

**SECTION II                      CONTRACT DOCUMENTS / EXHIBITS**



## BID PROPOSAL

**BID LOCATION:** Bayfield Town Hall  
85450 CTH J, Bayfield WI, 54891

**BID DATE:** DEC. 16<sup>th</sup>, 2022

**BID TIME:** 1:00 pm closing – to be read at 2pm

**PROJECT:** Pikes Bay Sanitary District #1 (PBSB)  
Lower Lift Station (LS) – Force Main (FM) Project

Proposal of \_\_\_\_\_  
(herein after called BIDDER) a corporation of \_\_\_\_\_, a partnership, or an individual doing business as \_\_\_\_\_.

**TO: The Pikes Bay Sanitary District #1 (PBSB)**

The BIDDER, in compliance with your invitation for bids for the construction of the

### Lower Lift Station (LS) – Force Main (FM) Project.

and having examined the Plans and Specifications and related documents prepared by LUND ENGINEERING, and the site of the proposed project, including the availability of materials and labor, hereby propose to furnish all labor, equipment, materials and supplies, and to construct the project in accordance with the Contract Documents within the time set forth therein, and at the prices set forth below. Those prices are to cover all of the expenses incurred in performing the work required under the Contract Documents, of which this Proposal is a part thereof.

The BIDDER hereby agrees to commence Work on the Contract on or before a date specified in the written "Notice To Proceed" of the Owner and to substantially complete the Project by Nov. 30<sup>th</sup>, 2023. Final Completion shall be achieved by Dec. 15<sup>th</sup>, 2023.

*Substantial completion shall be: to install the Force Main (FM), to abandon the old FM, to place the gravel CABC, to set all MH's & Valves, and to perform the majority of the Restoration.*

The BIDDER agrees to pay as liquidated damages the sum of **\$200.00** for each consecutive day thereafter, past the **substantial completion date** and **\$500.00** for each consecutive day past the **final completion date**. ( Unless a shutdown is mutually agreed to between the Owner and Contractor )

The BIDDER acknowledges receipt of the following addenda:

Award is expected within 45 days of the Bid Opening.

The BIDDER agrees to perform all the Work described in the Contract Documents for the following price: \_\_\_\_\_ Dollars.  
\$ \_\_\_\_\_ based on the unit price bid proposal schedule attached.

\_\_\_\_\_  
(BIDDER)

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)



**PIKES BAY SANITARY DISTRICT #1****PBSD Lower Lift Station (LS) Force Main (FM) Project****BID PROPOSAL SCHEDULE****NOV 16, 2022**

BID DATE DEC 16TH, 2022

**BY: LUND ENGINEERING: RANDY M. LUND, PE****CONTRACTOR:** \_\_\_\_\_**SIGNED:** \_\_\_\_\_**DATED:** \_\_\_\_\_**Lower LS FM Project From Lower LS to MH #FM8****ITEM**

1. Forcemain (FM) - Exploratory for LOCATING Existing FM
2. SELECT BACKFILL (SAND)
3. Wetland - Protection - SOIL SALVAGE ( fabric DOT SAS)
4. Lift Sta. Connect to Existing FM @ LS VALVE VAULT
5. CABC (WASHED GRAVEL) BEDDING: USE W/ENGINEER'S APPROVAL
6. Connect to Exist MH # FM8 - CORE DRILL REQUIRED
7. MH -5' Dia. W/GATE VALVE (includes R1550 casting) \*
8. MH- 5' Dia. - w/Air Vacuum Valves (inc. R1550 casting)
- 9A. Forcemain (FM) - 6" HDPE DR11 200 psi \*\*
- 9B. Forcemain (FM) - PVC 6" SDR17 RING TITE PRESSURE 250 PSI \*\*
- 10A. FM - BORE OR DRILL ROAD X-ing / 6" HDPE DR11 200 psi \*\*
- 10B. FM - BORE OR DRILL ROAD X-ing / PVC 6" SDR17 RING TITE 250 PSI \*\*
11. TRAFFIC CONTROL / MARINA ACCESS CONTROL \*\*\*
12. Culvert Extension 36" HDPE w/steel end
13. Asphalt Replacement 4" MIN.
14. Heavy Riprap (WI DOT) at Culvert / Slopes (to include HR fabric under liner)
15. CABC 3/4" (Gravel) REPLACEMENT 8" MIN.
16. Erosion Control (SILT FENCE, CHECK DAMS, BALES, ETC)
17. Clear & Grub & DEBRIS DISPOSAL
18. Abandon Old FM (seal pipes, backfill old MH's, SALVAGE CASTINGS)
19. Landscaping / Restoration IN KIND
20. Mobilization / ACCESS TO ROUTE EASEMENT

UNIT	UNIT COST	QUANTITY	COST
LS	\$ -	1	\$ -
CY	\$ -	400	\$ -
SY	\$ -	2000	\$ -
LS	\$ -	1	\$ -
CY	\$ -	100	\$ -
LS	\$ -	1	\$ -
EA	\$ -	2	\$ -
EA	\$ -	3	\$ -
LF	\$ -	2000	\$ -
LF	\$ -	2000	\$ -
LS	\$ -	1	\$ -
LS	\$ -	1	\$ -
LS	\$ -	1	\$ -
LF	\$ -	75	\$ -
LS	\$ -	1	\$ -
CY	\$ -	200	\$ -
CY	\$ -	250	\$ -
LS	\$ -	1	\$ -
LS	\$ -	1	\$ -
LS	\$ -	1	\$ -
LS	\$ -	1	\$ -
LS	\$ -	1	\$ -
BASE BID TOTAL			\$ -



**PIKES BAY SANITARY DISTRICT #1****PBSD Lower Lift Station (LS) Force Main (FM) Project****BID PROPOSAL SCHEDULE****NOV 16, 2022****BID DATE DEC 16TH, 2022****BY: LUND ENGINEERING: RANDY M. LUND, PE****CONTRACTOR:** \_\_\_\_\_**SIGNED:** \_\_\_\_\_**DATED:** \_\_\_\_\_**Lower LS FM Project From Lower LS to MH #FM8****Wage Rage -Allowance (INCREASE)for Federal Wage Rates**

LS	\$ -	1	\$ -
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**GRAND TOTAL W/ WAGE RATE ALLOWANCE , Lower Lift Station FM Project**

\$ -
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**ITEM # 10 - NO OPEN CUT OF PIKES BAY ROAD - ITEM TO INCLUDE ANY CASING, GROUT, MECH. JOINT FITTINGS AND ~50 LF PIPE****\* ITEM # 7 TO INCLUDE GATE VALVE & 2" BLEED VALVE****\*\* ALTERNATE: Item #9 & #10 FM -Quote ONLY 9A OR 9B & ONLY 10A OR 10B****NOTE: 6" HDPE PIPE DR11 HAS I.D. = 5.35' O.D. = 6.625****NOTE: 6" PVC SDR17 RING TITE PRESSURE PIPE HAS I.D. = 5.80" O.D. =6.625****\*\*\* MARINA ACCESS - CONTRACTOR SHALL NOT INTERFER WITH MARINA BOAT MOVEMENTS MAY 20- JUNE 10****NOTE: ALL PIPE FITTINGS TO BE INCLUDED IN PIPE PRICE PER LF****NOTE: ALTERNATE DEPTH FOR FM FROM 0+00 TO 9+50 SHALL INCLUDE INSULATION (4" MIN. 4' WIDE) PER WI S&W SPEC 6th****NOTE: MH'S - 18" SUMP & 24" ABOVE Exist grade plus 7.5' = 11.0 ft minimum Rim to Inv. (Alt. profile 8.0 ft Min. 0+00 to 9+50)****NOTE: Asphalt paving to be placed in 2024****NOTE: ITEMS 7&8 TO INCLUDE SCHEDULE 80 PVC PIPE (O.D. = 6.625) & MECH. JOINT FITTINGS****NOTE: ITEMS 7&8 - PIPE THRU MH (PLUS 2' EACH SIDE) TO CONNECT TO FM OUTSIDE MH****SPECIFICATIONS:****WI DOT STANDARD SPECIFICATIONS****WI STANDARD SPEC. - SEWER & WATER CONSTRUCTION 6TH****WI DNR TECH SPEC'S****PBSD ORDINANCES / STANDARDS**



**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**

**SUPPLEMENTAL CONDITIONS**

**A. Marina Coordination:**

- a. The **Port Superior Marina** and the **Pikes Bay Marina** must have access at all times during the Boat Load in and Load out timeframes.
- b. Specifically, the Marina's shall have full access during the **May 20 to June 10** timeframe.

**B. General – Supplemental Conditions**

1. Liquidated damages shall be as stated in Article 3 of the Standard Form of Agreement (between Owner and Contractor).

2. Submittals:

- a. Shop drawings are required. The Contractor shall supply the following shop drawings to the ENGINEER (as applicable):
  - manholes/castings    - valves/hydrants    - fitting locations    - pipes
  - structures    - under-drains    - geotextile fabrics    - end-sections
- b. Material certifications are required, for pipe and concrete products. Asphalt job mix reports and aggregate gradations are required.
- c. Product data on hydrants, valves, and piping is required in triplicate (as applicable).
- d. A Construction Schedule shall be provided within ten (10) days of Contract Execution.

3. Permits

- a. Permits are included in Tech Spec. 'E' for the PROJECT.
  - b. All permit conditions and requirements shall be adhered to, by the Contractor.
  - c. WI DNR erosion control requirements will be enforced.
4. Meetings may be held at the site to discuss progress and construction issues. A pre- construction meeting may be held to discuss procedures and schedules.
5. The Contractor shall give two (2) full working days notice to the Engineer when construction staking is required.
- a. The Engineer shall provide one-time staking for alignment and grade for the project.



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- b. Benchmarks will be set at locations, approx. 1000' apart.
- c. Re-staking will be at the Contractors expense. The Owner will deduct re-staking costs, from Contractors pay requests.
- d. Contractor is responsible for installation to correct horizontal and vertical alignments.

## 6. Weather Delays

- a. The project may encounter weather delays but it is the intent of the Owner to finish the project by the dates listed in the Standard Form of Agreement Between the Owner and Contractor.
- b. If the Contractor feels that the schedule cannot be met the Contractor shall inform the Owner in the bid proposal.

## 7. Construction Testing / Observation

- a. Pipeline pressure testing will be required for water mains and sanitary sewers (as applicable).
- b. The Contractor will be responsible for providing all tools, equipment and labor necessary for accomplishing the tests.
- c. The Engineer shall be notified 3 working days in advance of when testing will be performed.
- d. Tests shall be in accordance with the Standard Specifications for Sewer and Water Construction in Wisconsin for the following:

- Sanitary sewer
  - 1. deflection test
  - 2. low pressure air test / Hydrostatic for Force Main Projects
  - 3. lamping
- Watermain
  - 1. leakage
  - 2. bacteriological
  - 3. pressure
  - 4. chlorination
  - 5. continuity

- e. The Contractor shall adhere to OSHA confined space entry regulations.

## 8. De-watering / Drainage

- a. Contractor is responsible for de-watering and any necessary permits.



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- b. Contractor is responsible for site drainage during construction. Positive site drainage is required to prevent saturating sub-grades and structures.
- c. WI DNR permits may required for de-watering in excess of 70 gpm. (See NR 812)

## 9. Standards

- a. All appropriate ASTM, AWWA, NEMA and ANSI standards shall be followed (see the technical specifications and the reference specifications).

## 10. Record Drawings

- a. Contractor shall keep record drawings for all underground installations. Items shall be referenced (measured) to permanent fixtures on the surface for horizontal and vertical locations.
- b. Contractor shall submit record drawing information to the Owner prior to final payment.

## 11. Site Safety / Access

- a. Contractor is responsible for all site safety and security.
- b. Contractor shall adhere to all OSHA regulations.
- c. Contractor shall not impede traffic flow without notifying the Owner unless traffic control devices are in place.

- 12. The Contractor will be responsible to provide adequate bedding for the pipe per the Standard Specifications for Sewer and Water Construction in Wisconsin and the manufacturers recommendations. The Contractor shall provide (at no extra cost) ¾" crushed aggregate (4" thick) as bedding, if soils are wet, in addition to standard bedding material.

- 13. WI DOT regulations shall be adhered to, for building services. Note that clear water from sump pumps, foundation drains, and roof drains, etc. CANNOT be connected to the sanitary sewer.

- 14. Erosion Control devices shall be in place prior to beginning construction.

- a. Erosion bales and/or silt fence shall be placed every 300 feet along concentrated water flow paths; or at the Engineer's direction.
- b. Six (6)' foot steel posts shall be used (every 15') to reinforce silt fence and to secure erosion bales.



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- c. Sediment traps, tracking pads, and check dams shall be used to limit sediment transport offsite. These items are incidental to the Project, and shall be used at the Engineer's direction.
  - d. WI DNR Best Management Practices shall be utilized.
- 15. The locations of existing and proposed Utilities as shown on the plans are approximate. There may be other Utilities within the project limits which are not shown on the plans. Diggers Hotline shall be contacted 3 days prior to any excavation. The Contractor is responsible for coordination for Utility relocations.
- 16. **Soil borings** have been performed for this project.
- 17. Except where otherwise indicated on the plans or in the proposal and the supplementary specifications contained herein, all materials and workmanship shall be in accordance with the State of WI Department of Transportation Standard Specifications, 2015 Edition.
- 18. If the asphaltic surface pavements are to be completed after the winter season has passed, a tack coat shall be incidental to the asphalt cost. The tack coat shall be applied immediately prior to surface paving.
- 19. Contractor is required to maintain traffic on all streets during construction for local residents. Adequate Traffic Control signs shall be placed by the Contractor
- 20. Unsuitable soils quantities in the bid form include frost heave material, peat, organic, and other material, as determined by engineer in field, shall be removed. The EBS bid item shall be used for removal and backfill, if included in the bid proposal schedule.
- 21. Water service shall be maintained by the contractor. Contractor shall give affected home owners 48 hours notice prior to turning off the water main (costs are incidental to water main construction). Water service outages shall be limited to four (4) hours, otherwise temporary water service shall be provided. The existing water services shall be maintained until the new water mains are tested and disinfected.
- 22. Construction Progress
  - a. Construction shall proceed in a fashion to allow local traffic to have access. If alleys or other roads are unavailable, then temporary access (on gravel) shall be provided.
  - b. The schedule shall proceed so that once a road is closed to thru traffic, it is continuously worked on until a gravel surface is replaced and thru traffic is restored.
- 23. All signs and mail boxes that need to be moved during construction shall be done so by Contractor. All signs and mail boxes shall be replaced by Contractor in accordance with the Manual on Uniform Traffic Control Devices, and Post Office requirements.



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24. Existing culverts that are in the proposed roadway or will no longer be necessary do to altered drainage shall be completely removed. The cost shall be incidental to the Project, unless the Bid Item "Removing Culverts" is included.
25. All asphalt and concrete drives and road surfaces shall be saw cut, after road construction and prior to paving.
26. Driveways shall be restored with like materials to the limits of the right-of-way unless otherwise noted on plans or requested by engineer in field.
27. Maximum driveway grade shall be 8%.
28. Under-drain is required on all urban streets, per specifications and details. All underdrain shall continue around the proposed RADII, and shall connect into all proposed catch-basins. All under-drains shall end @ a catch-basin and begin @ a cleanout.
29. Trees removed shall become the property of the Contractor, unless easement conditions dictate differently.
30. Haul Routes
  - a) Trucks must use designated truck routes whenever possible.
  - b) Damage to local streets shall be the Contractor's responsibility to repair.
31. Existing castings and hydrants shall be salvaged for the Owner.
32. All concrete replacement, shall include #4 rebar's spaced at 3' to be installed between existing and proposed concrete pavements.
33. Curb ramps shall be installed at all urban intersections affected by the Project.
34. Contractor shall perform all work, and store all materials within the R/W or Project Easements; unless private owners have given their permission in writing.



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## EJCDC STANDARD FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR ON THE BASIS OF STIPULATED PRICE

THIS AGREEMENT is by and between the **Pikes Bay Sanitary District (PBSD)** (hereinafter called OWNER)

and \_\_\_\_\_  
\_\_\_\_\_ (hereinafter called CONTRACTOR).

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

### Article 1. WORK

1.01 CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

- A. FURNISH & INSTALL (F&I); 6" HDPE (200 psi) DR-11 IPS;  
OR PVC (250 psi) 6" SDR17 Ring-Tite IPS; Force Main (FM).
- B. F&I; Manhole 5' Dia. w/ 18" sump & set 2' above existing grade.
- C. F&I; CRUSHED AGGREGATE BASE COURSE; for roadway restoration.
- D. F&I; Erosion Control & Restoration
- E. F&I; Pavement replacement, in kind..
- F. F&I; 6" Gate Valve & 2" Ball Valve bleeder inside 5' MH.
- G. F&I Air / Vacuum Valves, inside 5' MH.
- H. F&I Culvert Extension 36" w/ Rip Rap (including HR fabric under-liner)
- I. F&I; All other items as listed in the bid proposal schedule, or required by the Specifications.

### Article 2 THE PROJECT

2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**

### **Article 3. ENGINEER**

3.01 The Project has been designed by:

**LUND ENGINEERING** (RANDY M. LUND, PE)



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

who are hereinafter called ENGINEER and who are to act as OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

## Article 4. CONTRACT TIME

4.01 *Time of the Essence* All time limits for Milestones, if any, Substantial completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence for the Contract.

4.02 *Dates for Substantial Completion and Final Payment* The Work will be Substantially Completed (defined as ALL WORK EXCEPT ASPHALT SURFACE) on or before **Nov 30, 2023**, and completed and ready for Final Payment in accordance with paragraph 14.07 of the General conditions on or before **Dec.. 15, 2023.**

4.03 *Liquidated Damages.* OWNER and CONTRACTOR recognize that time is of the essence or this Agreement and that OWNER will suffer financial loss if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER **Two Hundred** dollars (**\$200.00**) for each day that expires after the time specified in paragraph 4.02 for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER **Five Hundred** Dollars (**\$500.00**) for each day that expires after the time specified in paragraph 4.02 for completion and readiness for final payment until the work is completed and ready for final payment.

## Article 5. CONTRACT PRICE.

5.01 OWNER shall pay CONTRACTOR for completion of the Work in accordance with the Contract Documents and amount in current funds equal to the sum of the amounts determined pursuant to paragraph 5.01C below:

- A. Not used.
- B. Not used.
- C. For all Work, at the prices stated in CONTRACTOR'S Bid, attached hereto as an exhibit.



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## UNIT PRICE WORK

(SEE ATTACHED PROPOSAL SCHEDULE)

TOTAL OF ALL UNIT PRICES

\_\_\_\_\_ (dollars)  
(use words)

\$ \_\_\_\_\_ (dollars)  
(use numbers)

As provided in paragraph 11.03 of the General Conditions estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by ENGINEER as provided in paragraph 9.08 of the General Conditions. Unit prices have been computed as provided in paragraph 11.03 of the General Conditions.

### Article 6. PAYMENT PROCEDURES

#### 6.01 *Submittal and Processing of Payments*

A. CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by ENGINEER as provided in the General Conditions.

#### 6.02 *Progress Payments; Retainage.*

A. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR's Applications for Payment as recommended by ENGINEER, on or about the 5th Day of each month during construction as provided in paragraphs 6.02.A.1 and 6.02A.2 below. All such payments will be measured by the schedule of values established in paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as ENGINEER may determine, or OWNER may withhold, in accordance with paragraph 14.02 of the General Conditions.

a. 90 % of Work completed (with the balance being retainage). If Work has been 50% completed as determined by ENGINEER, and if the character and progress of the Work have been satisfactory to OWNER and ENGINEER,



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OWNER, on recommendation of ENGINEER, may determine that as long as the character and progress of the Work remain satisfactory to them, there will be no additional retainage on account of Work subsequently completed, in which case the remaining progress payments prior to Substantial Completion will be in an amount equal to 100% of the Work completed less the aggregate of payments previously made; and

b. 50 % (of cost) of materials and equipment not incorporated in the Work (but with the balance being retainage).

2. Upon Substantial Completion, the OWNER shall pay an amount sufficient to increase total payments to CONTRACTOR to 95% of the work completed less such amounts as ENGINEER shall determine, in accordance with paragraph 14.02.B.5 or of the General Conditions and less 100 % of ENGINEER's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate Substantial Completion.

## *6.03 Final Payment.*

A. Upon final completion and acceptance of the Work in accordance with paragraph 14.07 of the General Conditions, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said paragraph 14.07.

## **Article 7. INTEREST.**

7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the rate of 12% per annum.

## **Article 8. CONTRACTOR'S REPRESENTATIONS.**

8.01 In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

A. CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.

B. CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local, and site conditions that may affect cost, progress, and performance of the Work.



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C. CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, and performance and furnishing of the Work.

D. CONTRACTOR has carefully studied all: 1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) which have been identified in the Supplementary Conditions as provided in paragraph 4.02 of the General Conditions and 2) reports and drawings of a Hazardous Environmental Condition, if any, at the Site which has been identified in the Supplementary Conditions are provided in paragraph 4.06 of the General Conditions.

E. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all investigations, explorations, tests, studies and data concerning conditions (surface, subsurface, and Underground Facilities) at or contiguous to the Site which may affect cost, progress, or performance of the Work or which relate to any aspect of the means, methods, techniques, sequences, and procedures of construction to be employed by CONTRACTOR, including applying the specific means, methods, techniques, sequences, and procedures of construction, if any, expressly required by the Contract Documents to be employed by CONTRACTOR, and safety precautions and programs incident thereto.

F. CONTRACTOR does not consider that any further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.

G. CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.

H. CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

I. CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.



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## Article 9. CONTRACT DOCUMENTS.

### 9.01 Contents

A. The Contract Documents consist of the following:

- 1 This Agreement (pages 1 to 9, inclusive).
- 2 Performance, Bonds (attached);
3. Payment Bond (attached);
4. Other Bonds (attached);
- 5 General Conditions (1 to 58, inclusive).
- 6 Supplementary Conditions (pages 1 to 5, inclusive).
- 7 Specifications bearing the title:

**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**

and consisting of items as listed in table of contents thereof.

- 8 Drawings as part of the PLAN Set with each sheet bearing the following general title:

**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**

- 9 Addenda numbers \_\_\_\_ to \_\_\_\_, inclusive.
10. Exhibits to this Agreement (enumerated as follows):
  - a. Notice to Proceed (attached);
  - b. CONTRACTOR's Bid (attached).
  - c. Documentation submitted by CONTRACTOR prior to Notice of Award (attached).
  - d. Bid Submittal Package



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11. The following which may be delivered or issued after the Effective Date of the Agreement and are not attached hereto:

- a. All Written Amendments
- b. Work Change Directives
- c. Change Order(s)

B. The documents listed in paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).

C. There are no Contract Documents other than those listed above in this Article 9.

D. The Contract Documents may only be amended, modified, or supplemented as provided in paragraph 3.05 of the General Conditions.

## Article 10. MISCELLANEOUS

### 10.01 *Terms*

A. Terms used in this will have the meanings indicated in the General Conditions.

### 10.02 *Assignment of Contract*

A. No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound ; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

### 10.03 *Successors and Assigns*

A. OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.



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## 10.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER and CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

## 10.05 OTHER PROVISIONS

A. \_\_\_\_\_



# LUND ENGINEERING

**Randy M. Lund, PE** (WI, MN, MI, IL, IA)

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. One counterpart each has been delivered to OWNER, and CONTRACTOR. All portions of the contract Documents have been signed or identified by OWNER and CONTRACTOR or on their behalf.

This Agreement will be effective on \_\_\_\_\_, 20\_\_\_\_ (which is the Effective Date of the Agreement).

OWNER: PBSD

CONTRACTOR: \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

(CORPORATE SEAL)

(CORPORATE SEAL)

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

By: \_\_\_\_\_

By: \_\_\_\_\_

Address for giving notices

PBSD

President, AJ. Long

PO Box 689

Bayfield, WI 54814

Address for giving notices

(If OWNER is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of OWNER-CONTRACTOR Agreement)

License No. \_\_\_\_\_

Agent for service of process: \_\_\_\_\_

(If CONTRACTOR is a corporation, attach evidence of authority to sign.)

Designated Representative:

Designated Representative:

Name: Randy M. Lund, PE

Name: \_\_\_\_\_

Title: Project Manager

Title: \_\_\_\_\_

Address: 415 3<sup>rd</sup> Street / PO Box 243  
Washburn WI 54891

Address: \_\_\_\_\_

Phone: 715-209-0367

Phone: \_\_\_\_\_

Email: rmlund1@charter.net

Phone: \_\_\_\_\_



**BID BOND****BIDDER (Name and Address):**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**SURETY (Name and Address of Principal Place of Business):**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**OWNER (Name and Address):**

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**BID**

BID DUE DATE: \_\_\_\_\_

PROJECT (Brief Description Including Location):

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**BOND**

BOND NUMBER: \_\_\_\_\_

DATE (Not later than Bid due date): \_\_\_\_\_

PENAL SUM: \_\_\_\_\_

(Words)

(Figures)

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

**BIDDER****SURETY**

\_\_\_\_\_  
 \_\_\_\_\_ (Seal)  
 Bidder's Name and Corporate Seal

\_\_\_\_\_  
 \_\_\_\_\_ (Seal)  
 Surety's Name and Corporate Seal

By: \_\_\_\_\_  
 Signature and Title

By: \_\_\_\_\_  
 Signature and Title  
 (Attach Power of Attorney)

Attest: \_\_\_\_\_  
 Signature and Title

Attest: \_\_\_\_\_  
 Signature and Title

- Note: (1) Above addresses are to be used for giving required notice.  
 (2) Any singular reference to Bidder, Surety, OWNER or other party shall be considered plural where applicable.



## DAMAGES FORM

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to OWNER upon default of Bidder any difference between the total amount of Bidder's Bid and the total amount of the Bid of the next lowest, responsible and responsive Bidder as determined by OWNER for the Work required by the Contract Documents, provided that:

- 1.1. If there is no such next lowest, responsible and responsive Bidder, and OWNER does not abandon the Project, then Bidder and Surety shall pay to OWNER the penal sum set forth on the face of this Bond, and
- 1.2. In no event shall Bidder's and Surety's obligation hereunder exceed the penal sum set forth on the face of this Bond.

2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by OWNER) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents.

3. This obligation shall be null and void if:

- 3.1. OWNER accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by OWNER) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents, or
- 3.2. All Bids are rejected by OWNER, or
- 3.3. OWNER fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).

4. Payment under this Bond will be due and payable upon default by Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from OWNER, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.

5. Surety waives notice of and any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by OWNER and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.

6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.

7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.

8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.

9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer or proposal as applicable.



# Performance Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (Name and Address):

## CONTRACT

Date:

Amount:

Description (Name and Location):

## BOND

Date (Not earlier than Contract Date):

Amount:

Modifications to this Bond Form:

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Performance Bond to be duly executed on its behalf by its authorized officer, agent or representative.

## CONTRACTOR AS PRINCIPAL

Company: (Corp. Seal)

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

## SURETY

Company: (Corp. Seal)

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

## CONTRACTOR AS PRINCIPAL

Company: (Corp. Seal)

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

## SURETY

Company: (Corp. Seal)

Signature: \_\_\_\_\_

Name and Title: \_\_\_\_\_

EJCDC No. 1910-28-A (1996 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, and the American Institute of Architects.



1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Contract, which is incorporated herein by reference.

2. If the CONTRACTOR performs the Contract, the Surety and the CONTRACTOR have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.

3. If there is no OWNER Default, the Surety's obligation under this Bond shall arise after:

3.1. The OWNER has notified the CONTRACTOR and the Surety at the addresses described in paragraph 10 below, that the OWNER is considering declaring a CONTRACTOR Default and has requested and attempted to arrange a conference with the CONTRACTOR and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Contract. If the OWNER, the CONTRACTOR and the Surety agree, the CONTRACTOR shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive the OWNER's right, if any, subsequently to declare a CONTRACTOR Default; and

3.2. The OWNER has declared a CONTRACTOR Default and formally terminated the CONTRACTOR's right to complete the Contract. Such CONTRACTOR Default shall not be declared earlier than twenty days after the CONTRACTOR and the Surety have received notice as provided in paragraph 3.1; and

3.3. The OWNER has agreed to pay the Balance of the Contract Price to:

3.3.1. The Surety in accordance with the terms of the Contract;

3.3.2. Another contractor selected pursuant to paragraph 4.3 to perform the Contract.

4. When the OWNER has satisfied the conditions of paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1. Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the OWNER and the contractor selected with the OWNER's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to the OWNER the amount of damages as described in paragraph 6 in excess of the Balance of the Contract Price incurred by the OWNER resulting from the CONTRACTOR Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances;

4.4.1. After investigation, determine the amount for which it may be liable to the OWNER and, as soon as practicable after the amount is determined, tender payment therefor to the OWNER; or

4.4.2. Deny liability in whole or in part and notify the OWNER citing reasons therefor.

5. If the Surety does not proceed as provided in paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the OWNER to the Surety demanding that the Surety perform its obligations under this Bond, and the OWNER shall be entitled to enforce any remedy available to the OWNER. If the Surety proceeds as provided in paragraph 4.4, and the OWNER refuses the payment tendered or the Surety has denied

liability, in whole or in part, without further notice the OWNER shall be entitled to enforce any remedy available to the OWNER.

6. After the OWNER has terminated the CONTRACTOR's right to complete the Contract, and if the Surety elects to act under paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the OWNER shall not be greater than those of the CONTRACTOR under the Contract, and the responsibilities of the OWNER to the Surety shall not be greater than those of the OWNER under the Contract. To a limit of the amount of this Bond, but subject to commitment by the OWNER of the Balance of the Contract Price to mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:

6.1. The responsibilities of the CONTRACTOR for correction of defective Work and completion of the Contract;

6.2. Additional legal, design professional and delay costs resulting from the CONTRACTOR's Default, and resulting from the actions or failure to act of the Surety under paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the CONTRACTOR.

7. The Surety shall not be liable to the OWNER or others for obligations of the CONTRACTOR that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the OWNER or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after CONTRACTOR Default or within two years after the CONTRACTOR ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1. Balance of the Contract Price: The total amount payable by the OWNER to the CONTRACTOR under the Contract after all proper adjustments have been made, including allowance to the CONTRACTOR of any amounts received or to be received by the OWNER in settlement of insurance or other Claims for damages to which the CONTRACTOR is entitled, reduced by all valid and proper payments made to or on behalf of the CONTRACTOR under the Contract.

12.2. Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

12.3. CONTRACTOR Default: Failure of the CONTRACTOR, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4. OWNER Default: Failure of the OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENT or BROKER: OWNER'S REPRESENTATIVE (Engineer or other party):



1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Contract, which is incorporated herein by reference.

2. If the CONTRACTOR performs the Contract, the Surety and the CONTRACTOR have no obligation under this Bond, except to participate in conferences as provided in paragraph 3.1.

3. If there is no OWNER Default, the Surety's obligation under this Bond shall arise after:

3.1. The OWNER has notified the CONTRACTOR and the Surety at the addresses described in paragraph 10 below, that the OWNER is considering declaring a CONTRACTOR Default and has requested and attempted to arrange a conference with the CONTRACTOR and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Contract. If the OWNER, the CONTRACTOR and the Surety agree, the CONTRACTOR shall be allowed a reasonable time to perform the Contract, but such an agreement shall not waive the OWNER's right, if any, subsequently to declare a CONTRACTOR Default; and

3.2. The OWNER has declared a CONTRACTOR Default and formally terminated the CONTRACTOR's right to complete the Contract. Such CONTRACTOR Default shall not be declared earlier than twenty days after the CONTRACTOR and the Surety have received notice as provided in paragraph 3.1; and

3.3. The OWNER has agreed to pay the Balance of the Contract Price to:

3.3.1. The Surety in accordance with the terms of the Contract;

3.3.2. Another contractor selected pursuant to paragraph 4.3 to perform the Contract.

4. When the OWNER has satisfied the conditions of paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

4.1. Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Contract; or

4.2. Undertake to perform and complete the Contract itself, through its agents or through independent contractors; or

4.3. Obtain bids or negotiated proposals from qualified contractors acceptable to the OWNER for a contract for performance and completion of the Contract, arrange for a contract to be prepared for execution by the OWNER and the contractor selected with the OWNER's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the Bonds issued on the Contract, and pay to the OWNER the amount of damages as described in paragraph 6 in excess of the Balance of the Contract Price incurred by the OWNER resulting from the CONTRACTOR Default; or

4.4. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances;

4.4.1. After investigation, determine the amount for which it may be liable to the OWNER and, as soon as practicable after the amount is determined, tender payment therefor to the OWNER; or

4.4.2. Deny liability in whole or in part and notify the OWNER citing reasons therefor.

5. If the Surety does not proceed as provided in paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the OWNER to the Surety demanding that the Surety perform its obligations under this Bond, and the OWNER shall be entitled to enforce any remedy available to the OWNER. If the Surety proceeds as provided in paragraph 4.4, and the OWNER refuses the payment tendered or the Surety has denied

liability, in whole or in part, without further notice the OWNER shall be entitled to enforce any remedy available to the OWNER.

6. After the OWNER has terminated the CONTRACTOR's right to complete the Contract, and if the Surety elects to act under paragraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the OWNER shall not be greater than those of the CONTRACTOR under the Contract, and the responsibilities of the OWNER to the Surety shall not be greater than those of the OWNER under the Contract. To a limit of the amount of this Bond, but subject to commitment by the OWNER of the Balance of the Contract Price to mitigation of costs and damages on the Contract, the Surety is obligated without duplication for:

6.1. The responsibilities of the CONTRACTOR for correction of defective Work and completion of the Contract;

6.2. Additional legal, design professional and delay costs resulting from the CONTRACTOR's Default, and resulting from the actions or failure to act of the Surety under paragraph 4; and

6.3. Liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the CONTRACTOR.

7. The Surety shall not be liable to the OWNER or others for obligations of the CONTRACTOR that are unrelated to the Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the OWNER or its heirs, executors, administrators, or successors.

8. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

9. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the Work or part of the Work is located and shall be instituted within two years after CONTRACTOR Default or within two years after the CONTRACTOR ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

10. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the address shown on the signature page.

11. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted here from and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

12. Definitions.

12.1. Balance of the Contract Price: The total amount payable by the OWNER to the CONTRACTOR under the Contract after all proper adjustments have been made, including allowance to the CONTRACTOR of any amounts received or to be received by the OWNER in settlement of insurance or other Claims for damages to which the CONTRACTOR is entitled, reduced by all valid and proper payments made to or on behalf of the CONTRACTOR under the Contract.

12.2. Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

12.3. CONTRACTOR Default: Failure of the CONTRACTOR, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Contract.

12.4. OWNER Default: Failure of the OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

(FOR INFORMATION ONLY--Name, Address and Telephone)

AGENT or BROKER: OWNER'S REPRESENTATIVE (Engineer or other party):



# Payment Bond

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

**CONTRACTOR (Name and Address):**

**SURETY (Name and Address of Principal Place of Business):**

**OWNER (Name and Address):**

## CONTRACT

**Date:**

**Amount:**

**Description (Name and Location):**

## BOND

**Date (Not earlier than Contract Date):**

**Amount:**

**Modifications to this Bond Form:**

Surety and Contractor, intending to be legally bound hereby, subject to the terms printed on the reverse side hereof, do each cause this Payment Bond to be duly executed on its behalf by its authorized officer, agent, or representative.

## CONTRACTOR AS PRINCIPAL

**Company:** \_\_\_\_\_ (Corp. Seal)

**Signature:** \_\_\_\_\_

**Name and Title:** \_\_\_\_\_

## SURETY

**Company:** \_\_\_\_\_ (Corp. Seal)

**Signature:** \_\_\_\_\_

**Name and Title:** \_\_\_\_\_

(Attach Power of Attorney)

(Space is provided below for signatures of additional parties, if required.)

## CONTRACTOR AS PRINCIPAL

**Company:** \_\_\_\_\_ (Corp. Seal)

**Signature:** \_\_\_\_\_

**Name and Title:** \_\_\_\_\_

## SURETY

**Company:** \_\_\_\_\_ (Corp. Seal)

**Signature:** \_\_\_\_\_

**Name and Title:** \_\_\_\_\_

EJCDC No. 1910-28-B (1996 Edition)

Originally prepared through the joint efforts of the Surety Association of America, Engineers Joint Contract Documents Committee, the Associated General Contractors of America, the American Institute of Architects, the American Subcontractors Association, and the Associated Specialty Contractors.



1. The CONTRACTOR and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the OWNER to pay for labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference.

2. With respect to the OWNER, this obligation shall be null and void if the CONTRACTOR:

2.1. Promptly makes payment, directly or indirectly, for all sums due Claimants, and

2.2. Defends, indemnifies and holds harmless the OWNER from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Contract, provided the OWNER has promptly notified the CONTRACTOR and the Surety (at the addresses described in paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the CONTRACTOR and the Surety, and provided there is no OWNER Default.

3. With respect to Claimants, this obligation shall be null and void if the CONTRACTOR promptly makes payment, directly or indirectly, for all sums due.

4. The Surety shall have no obligation to Claimants under this Bond until:

4.1. Claimants who are employed by or have a direct contract with the CONTRACTOR have given notice to the Surety (at the addresses described in paragraph 12) and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.

4.2. Claimants who do not have a direct contract with the CONTRACTOR:

1. Have furnished written notice to the CONTRACTOR and sent a copy, or notice thereof, to the OWNER, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

2. Have either received a rejection in whole or in part from the CONTRACTOR, or not received within 30 days of furnishing the above notice any communication from the CONTRACTOR by which the CONTRACTOR had indicated the claim will be paid directly or indirectly; and

3. Not having been paid within the above 30 days, have sent a written notice to the Surety and sent a copy, or notice thereof, to the OWNER, stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the CONTRACTOR.

5. If a notice required by paragraph 4 is given by the OWNER to the CONTRACTOR or to the Surety, that is sufficient compliance.

6. When the Claimant has satisfied the conditions of paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:

6.1. Send an answer to the Claimant, with a copy to the OWNER, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.

6.2. Pay or arrange for payment of any undisputed amounts.

7. The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.

8. Amounts owed by the OWNER to the CONTRACTOR under the Contract shall be used for the performance of the Contract and to satisfy claims, if any, under any Performance Bond. By the CONTRACTOR furnishing and the OWNER accepting this Bond, they agree that all funds earned by the CONTRACTOR in the performance of the Contract are dedicated to satisfy obligations of the CONTRACTOR and the Surety under this Bond, subject to the OWNER's priority to use the funds for the completion of the Work.

9. The Surety shall not be liable to the OWNER, Claimants or others for obligations of the CONTRACTOR that are unrelated to the Contract. The OWNER shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.

10. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related Subcontracts, purchase orders and other obligations.

11. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which the Work or part of the Work is located or after the expiration of one year from the date (1) on which the Claimant gave the notice required by paragraph 4.1 or paragraph 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the OWNER or the CONTRACTOR shall be mailed or delivered to the addresses shown on the signature page. Actual receipt of notice by Surety, the OWNER or the CONTRACTOR, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the Contract was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is, that this Bond shall be construed as a statutory Bond and not as a common law bond.

14. Upon request of any person or entity appearing to be a potential beneficiary of this Bond, the CONTRACTOR shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### 15. DEFINITIONS

15.1. Claimant: An individual or entity having a direct contract with the CONTRACTOR or with a Subcontractor of the CONTRACTOR to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in the terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Contract, architectural and engineering services required for performance of the Work of the CONTRACTOR and the CONTRACTOR's Subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.

15.2. Contract: The agreement between the OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

15.3. OWNER Default: Failure of the OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR as required by the Contract or to perform and complete or comply with the other terms thereof.

(FOR INFORMATION ONLY—Name, Address and Telephone)

AGENCY or BROKER:

OWNER'S REPRESENTATIVE (Engineer or other party):



## NOTICE OF AWARD

Dated \_\_\_\_\_

TO: \_\_\_\_\_  
(BIDDER)

ADDRESS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contract: \_\_\_\_\_

(Insert name of Contract as it appears in the Bidding Documents)

Project: \_\_\_\_\_

OWNER's Contract No. \_\_\_\_\_

You are notified that your Bid dated \_\_\_\_\_ for the above Contract has been considered. You are the apparent Successful Bidder and have been awarded a Contract for \_\_\_\_\_

(Indicate total Work, alternates or sections of Work awarded)

The Contract Price of your Contract is \_\_\_\_\_ Dollars (\$ \_\_\_\_\_).

*[Insert appropriate data if Unit Prices are used. Change language for Cost-Plus contracts]*

\_\_\_ copies of each of the proposed Contract Documents (except Drawings) accompany this Notice of Award. \_\_\_ sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within fifteen days of the date of this Notice of Award, that is by \_\_\_\_\_.

1. Deliver to the OWNER \_\_\_ fully executed counterparts of the Contract Documents. [Each of the Contract Documents must bear your signature on ( )].
2. Deliver with the executed Contract Documents the Contract security (Bonds) as specified in the Instructions to Bidders (Article 20), [and] General Conditions (paragraph 5.01) [and Supplementary Conditions (paragraph SC-5.01).]

EJCDC No. 1910-22 (1996 Edition)

Prepared by the Engineers Joint Contract Documents Committee and endorsed by The Associated General Contractors of America and the Construction Specifications Institute.



3. (List other conditions precedent).

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Failure to comply with these conditions within the time specified will entitle OWNER to consider your Bid in default, to annul this Notice of Award and to declare your Bid security forfeited.

Within ten days after you comply with the above conditions, OWNER will return to you one fully executed counterpart of the Contract Documents.

\_\_\_\_\_  
(OWNER)

By: \_\_\_\_\_

(AUTHORIZED SIGNATURE)

\_\_\_\_\_  
(TITLE)

Copy to ENGINEER  
(Use Certified Mail,  
Return Receipt Requested)



## NOTICE TO PROCEED

Dated \_\_\_\_\_

TO: \_\_\_\_\_  
(CONTRACTOR)

ADDRESS<sup>1</sup>: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Contract: \_\_\_\_\_  
(Insert name of Contract as it appears in the Contract Documents)

Project: \_\_\_\_\_

OWNER'S CONTRACT NO. \_\_\_\_\_

You are notified that the Contract Times under the above contract will commence to run on \_\_\_\_\_. By that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 4 of the Agreement the date of Substantial Completion is \_\_\_\_\_ and the date of readiness for final payment is \_\_\_\_\_.

Before you may start any Work at the Site, paragraph 2.05.C of the General Conditions provides that you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must  
(add other requirements)

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
(OWNER)

By: \_\_\_\_\_  
(AUTHORIZED SIGNATURE)

\_\_\_\_\_  
(TITLE)

Copy to ENGINEER

\_\_\_\_\_

<sup>1</sup>(Use Certified Mail, Return Receipt Requested)



**APPLICATION FOR PAYMENT NO. \_\_\_\_\_**

To: \_\_\_\_\_ (OWNER)  
From: \_\_\_\_\_ (CONTRACTOR)  
Contract: \_\_\_\_\_  
Project: \_\_\_\_\_  
OWNER's Contract No. \_\_\_\_\_ ENGINEER's Project No. \_\_\_\_\_  
For Work accomplished through the date of: \_\_\_\_\_

- |    |  |                 |
|----|--|-----------------|
| 1. | Original Contract Price:                                       | \$ _____        |
| 2. | Net change by Change Orders and Written Amendments (+ or -):   | \$ _____        |
| 3. | Current Contract Price (1 plus 2):                             | \$ _____        |
| 4. | Total completed and stored to date:                            | \$ _____        |
| 5. | Retainage (per Agreement):                                     |                 |
|    | _____ % of completed Work:                                     | \$ _____        |
|    | _____ % of stored material:                                    | \$ _____        |
|    | Total Retainage:   | \$ _____        |
| 6. | Total completed and stored to date less retainage (4 minus 5): | \$ _____        |
| 7. | Less previous Application for Payments:                        | \$ _____        |
| 8. | <b>DUE THIS APPLICATION (6 MINUS 7):</b>                       | <b>\$ _____</b> |

Accompanying Documentation: \_\_\_\_\_

**CONTRACTOR'S Certification:**

The undersigned CONTRACTOR certifies that (1) all previous progress payments received from OWNER on account of Work done under the Contract referred to above have been applied on account to discharge CONTRACTOR's legitimate obligations incurred in connection with Work covered by prior Applications for Payment numbered 1 through \_\_\_\_\_ inclusive; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to OWNER indemnifying OWNER against any such Lien, security interest or encumbrance); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and not defective.

Dated \_\_\_\_\_ CONTRACTOR

By: \_\_\_\_\_

State of \_\_\_\_\_  
County of \_\_\_\_\_  
Subscribed and sworn to before me this \_\_\_\_\_  
day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
Notary Public  
My Commission expires: \_\_\_\_\_

Payment of the above AMOUNT DUE THIS APPLICATION is recommended.

Dated \_\_\_\_\_ ENGINEER

By: \_\_\_\_\_



## **APPLICATION FOR PAYMENT**

### **INSTRUCTIONS**

---

#### **A. GENERAL INFORMATION**

The sample form of Schedule of Values is intended as a guide only. Many projects require a more extensive form with space for numerous items, descriptions of Change Orders, identification of variable quantity adjustments, summary of materials and equipment stored at the site and other information. It is expected that a separate form will be developed by Engineer and Contractor at the time Contractor's Schedule of Values is finalized. Note also that the format for retainage must be changed if the Contract permits (or the law provides), and Contractor elects to deposit securities in lieu of retainage. Refer to Article 14 of the General Conditions for provisions concerning payments to Contractor.

#### **B. COMPLETING THE FORM**

The Schedule of Values, submitted and approved as provided in paragraphs 2.05.B.3 and 2.07 of the General Conditions, should be reproduced as appropriate in the space indicated on the Application for Payment form. Note that the cost of materials and equipment is often listed separately from the cost of installation. Also, note that each Unit Price is deemed to include Contractor's overhead and profit.

All Change Orders affecting the Contract Price should be identified and included in the Schedule of Values as required for progress payments.

The form is suitable for use in the Final Application for Payment as well as for Progress Payments; however, the required accompanying documentation is usually more extensive for final payment. All accompanying documentation should be identified in the space provided on the form.

#### **C. LEGAL REVIEW**

All accompanying documentation of a legal nature, such as Lien waivers, should be reviewed by an attorney, and Engineer should so advise Owner.



Application No. \_\_\_\_\_ Date: \_\_\_\_\_

ITEM	UNIT PRICE	ESTIMATED QUANTITY	SCHEDULE OF VALUES AMOUNT	QUANTITY COMPLETED	AMOUNT	%	MATERIAL STORED	AMOUNT COMPLETED AND STORED
1.	\$		\$		\$		\$	\$
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								
21.								
22.								
23.								
24.								
25.								
26.								
27.								
28.								
29.								
30.								
<b>TOTAL</b>			\$		\$		\$	\$

Note: Total Schedule of Values Amount should equal the current Contract Price.



### WORK DIRECTIVE CHANGE

(Instructions on reverse side)

No. \_\_\_\_\_

PROJECT:

DATE OF ISSUANCE:

OWNER:

(Name,  
Address)

CONTRACTOR:

OWNER's Project No. \_\_\_\_\_

ENGINEER:

CONTRACT FOR:

ENGINEER's Project No. \_\_\_\_\_

You are directed to proceed promptly with the following change(s):

Description:

Purpose of Work Directive Change:

Attachments: (list documents supporting change)

If a claim is made that the above change(s) have affected Contract Price or Contract Time, any claim for a Change Order based thereon will involve one of the following methods of determining the effect of the change(s).

Method of determining change in  
Contract Price:

☐ Time and materials

☐ Unit prices

☐ Cost plus fixed fee

☐ Other \_\_\_\_\_

Estimated increase (decrease) in Contract  
Price: \$ \_\_\_\_\_

If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in  
Contract Time:

☐ Contractor's records

☐ Engineer's records

☐ Other \_\_\_\_\_

Estimated increase (decrease) in Contract  
Time: \_\_\_\_\_ days. If the change

involves an increase, the estimated time is not to be exceeded without further authorization.

RECOMMENDED:

by \_\_\_\_\_  
Engineer

AUTHORIZED:

by \_\_\_\_\_  
Owner



## **WORK DIRECTIVE CHANGE**

### **INSTRUCTIONS**

---

#### **A. GENERAL INFORMATION**

This document was developed for use in situations involving changes in the Work which, if not processed expeditiously, might delay the Project. These changes are often initiated in the field and may affect the Contract Price or the Contract Time. This is not a Change Order, but only a directive to proceed with Work that may be included in a subsequent Change Order.

For supplemental instructions and minor changes not involving a change in the Contract Price or the Contract Time, a Field Order may be used.

#### **B. COMPLETING THE WORK DIRECTIVE CHANGE FORM**

Engineer initiates the form, including a description of the items involved and attachments.

Based on conversations between Engineer and Contractor, Engineer completes the following:

**METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT PRICE:** Mark the method to be used in determining the final cost of Work involved and the net effect on the Contract Price. If the change involves an increase in the Contract Price and the estimated amount is approached before the additional or changed Work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Time, the space for estimated increase (decrease) should be marked "Not Applicable".

**METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT TIME:** Mark the method to be used in determining the change in Contract Time and the estimated increase or decrease in Contract Time. If the change involves an increase in the Contract Time and the estimated time is approached before the additional or changed Work is completed, another Work Directive Change must be issued to change the time or Contractor may stop the changed Work when the estimated time is reached. If the Work Directive Change is not likely to change the Contract Time, the space for estimated increase (decrease) should be marked "Not Applicable".

Once Engineer has completed and signed the form, all copies should be sent to Owner for authorization because Engineer alone does not have authority to authorize changes in Price or Time. Once authorized by Owner, a copy should be sent by Engineer to Contractor.

Once the Work covered by this directive is completed or final cost and time determined, Contractor should submit documentation for inclusion in a Change Order.

**THIS IS A DIRECTIVE TO PROCEED WITH A CHANGE THAT MAY AFFECT THE CONTRACT PRICE OR THE CONTRACT TIME. A CHANGE ORDER, IF ANY, SHOULD BE CONSIDERED PROMPTLY.**



# CHANGE ORDER

No. \_\_\_\_\_

DATE OF ISSUANCE \_\_\_\_\_

EFFECTIVE DATE \_\_\_\_\_

OWNER \_\_\_\_\_

CONTRACTOR \_\_\_\_\_

Contract: \_\_\_\_\_

Project: \_\_\_\_\_

OWNER's Contract No. \_\_\_\_\_

ENGINEER's Contract No. \_\_\_\_\_

ENGINEER \_\_\_\_\_

You are directed to make the following changes in the Contract Documents:

Description: \_\_\_\_\_

Reason for Change Order: \_\_\_\_\_

Attachments: (List documents supporting change)

CHANGE IN CONTRACT PRICE:
Original Contract Price \$ _____
Net Increase (Decrease) from previous Change Orders No. ____ to ____: \$ _____
Contract Price prior to this Change Order: \$ _____
Net increase (decrease) of this Change Order: \$ _____
Contract Price with all approved Change Orders: \$ _____

CHANGE IN CONTRACT TIMES:
Original Contract Times: Substantial Completion: _____ Ready for final payment: _____ (days or dates)
Net change from previous Change Orders No. ____ to No. ____: Substantial Completion: _____ Ready for final payment: _____ (days)
Contract Times prior to this Change Order: Substantial Completion: _____ Ready for final payment: _____ (days or dates)
Net increase (decrease) this Change Order: Substantial Completion: _____ Ready for final payment: _____ (days)
Contract Times with all approved Change Orders: Substantial Completion: _____ Ready for final payment: _____ (days or dates)

RECOMMENDED:

APPROVED:

ACCEPTED:

By: \_\_\_\_\_  
ENGINEER (Authorized Signature)

By: \_\_\_\_\_  
OWNER (Authorized Signature)

By: \_\_\_\_\_  
CONTRACTOR (Authorized Signature)

Date: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_

EJCDC 1910-8-B (1996 Edition)

Prepared by the Engineers Joint Contract Documents Committee and endorsed by The Associated General Contractors of America and the Construction Specifications Institute.



## **CHANGE ORDER**

### **INSTRUCTIONS**

---

#### **A. GENERAL INFORMATION**

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or Contract Times, a Field Order should be used.

#### **B. COMPLETING THE CHANGE ORDER FORM**

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.



## **CERTIFICATE OF SUBSTANTIAL COMPLETION**

DATE OF ISSUANCE \_\_\_\_\_

OWNER \_\_\_\_\_

CONTRACTOR \_\_\_\_\_

Contract: \_\_\_\_\_

Project: \_\_\_\_\_

OWNER's Contract No. \_\_\_\_\_

ENGINEER's Project No. \_\_\_\_\_

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

To \_\_\_\_\_

OWNER

And To \_\_\_\_\_

CONTRACTOR

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR and ENGINEER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on

DATE OF SUBSTANTIAL COMPLETION \_\_\_\_\_

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within \_\_\_\_\_ days of the above date of Substantial Completion.

EJCDC No. 1910-8-D (1996 Edition)

Prepared by the Engineers' Joint Contract Documents Committee and endorsed by The Associated General Contractors of America and the Construction Specifications Institute.



The responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance and warranties and guarantees shall be as follows:

OWNER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

The following documents are attached to and made a part of this Certificate:

*[For items to be attached see definition of Substantial Completion as supplemented and other specifically noted conditions precedent to achieving Substantial Completion as required by Contract Documents.]*

This certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Documents.

Executed by ENGINEER on \_\_\_\_\_  
Date

\_\_\_\_\_  
ENGINEER

By: \_\_\_\_\_  
(Authorized Signature)

CONTRACTOR accepts this Certificate of Substantial Completion on \_\_\_\_\_  
Date

\_\_\_\_\_  
CONTRACTOR

By: \_\_\_\_\_  
(Authorized Signature)

OWNER accepts this Certificate of Substantial Completion on \_\_\_\_\_  
Date

\_\_\_\_\_  
OWNER

By: \_\_\_\_\_  
(Authorized Signature)



# STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by



Issued and Published Jointly by





# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

## CONTRACTOR'S AFFIDAVIT OF DEBITS AND CLAIMS

PROJECT: Lower Lift Station (LS) – Force Main (FM) Project

Owner: **Pikes Bay Sanitary District #1 (PBSD)**

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

State: \_\_\_\_\_

County of: \_\_\_\_\_

Contract Date: \_\_\_\_\_

The undersigned hereby certifies that, except as listed below, he has paid in full or has otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with the performance of the Contract referred above for which the Owner or their property might in any way be held responsible.

EXCEPTIONS: (If none, write "NONE".)

CONTRACTOR:

Subscribed and sworn to before me

Address: \_\_\_\_\_

this \_\_\_\_ day of \_\_\_\_, 20\_\_

By: \_\_\_\_\_

Notary Public:

My Commission Expires:



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

## CONTRACTORS AFFIDAVIT OF RELEASE OF LIENS

PROJECT: Lower Lift Station (LS) – Force Main (FM) Project

Owner: Pikes Bay Sanitary District #1 (PBSD)

Contractor: \_\_\_\_\_

Address: \_\_\_\_\_ -

State: \_\_\_\_\_

County of: \_\_\_\_\_

Contract Date: \_\_\_\_\_ -

The undersigned hereby certifies that to the best of his knowledge, information and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers or Work, labor or services who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS: (if none, write “NONE”.)

CONTRACTOR:

Address: \_\_\_\_\_

By: \_\_\_\_\_

Subscribed and sworn to before me

this \_\_\_\_ day of \_\_\_\_, 20\_\_

Notary Public: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_



Lower Lift Station (LS) – Force Main (FM) Project

PROJECT SPECIFICATIONS

**SECTION III TECHNICAL SPECIFICATIONS**

These Technical Specifications, ONLY apply for Bid Items listed in the Bid Proposal Schedule. They also apply to work incidental to listed Bid Items.



**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**  
**TECHNICAL SPECIFICATIONS**

## **A. PROJECT WORK**

### 1. Summary of Work

- A. FURNISH & INSTALL (F&I); 6" HDPE (200 psi) DR-11 IPS;  
OR PVC (250 psi) 6" SDR17 Ring-Tite IPS; Force Main (FM).
- B. F&I; Manhole 5' Dia. w/ 18" sump & set 2' above existing grade.
- C. F&I; CRUSHED AGGREGATE BASE COURSE; for roadway restoration.
- D. F&I; Erosion Control & Restoration
- E. F&I; Pavement replacement, in kind..
- F. F&I; 6" Gate Valve & 2" Ball Valve bleeder inside 5' MH.
- G. F&I Air / Vacuum Valves, inside 5' MH.
- H. F&I Culvert Extension 36" w/ Rip Rap (including HR fabric under-liner)
- I. F&I; All other items as listed in the bid proposal schedule, or required by the Specifications.

### 2. Site Clearing / Erosion Control / Landscaping

- a. WI DNR Construction Site - Best Management Practices shall be followed in addition to erosion control items called for in the plans.
- b. Topsoil shall be salvaged and replaced after construction. Excess topsoil shall be the Contractor's responsibility and property, and shall be removed or placed on site at the Engineer's direction..
- c. Vegetation shall be re-established per **WI DOT Standard Specifications**.
- d. All vegetation and other debris removed shall be disposed of by the Contractor.
- e. Erosion Control shall be in place prior to the start of construction.
- f. Finished topsoil (in urban or rural lawn areas) shall be screened and free of debris for top 2". Bottom 2" can be salvaged topsoil.
- g. All excess material shall be disposed of by the Contractor.
- h. Salvaged topsoil may be used for rural areas and for the bottom 2" in the urban areas.

### 3. Site Work

- a. Contractor shall submit shop drawings for Engineer approval for:
  - castings
  - valves; gate & air /vacuum release
  - piping
  - fittings
  - structures (MH's, CB's etc.)
- b. Finished manhole rims to be set 6" above finished ground level in turf areas; 12" to 24" above existing grade, in low areas. Gravel shall be mounded around casting to blend to existing grade. In pavement areas the manhole rims shall match the existing or proposed pavement elevation



## 4. Backfill Materials

- a. Backfill materials for structures shall be compacted (95% proctor) granular backfill ; per WI DOT Specifications
- b. Backfill for PVC and HDPE pipes shall be per the **WI Standard Specifications for Sewer and Water 6th** and per pipe manufacturers recommendations.
- c. Crushed aggregate base course shall be Grade 2 per WI DOT Specifications.
- d. Riprap shall be standard riprap per WI DOT.
- e. Manholes shall be standard pre-cast manholes per the WI DOT Standard Specifications and per plan details.
- f. Landscaping shall conform to WI DOT specifications
- g. Trenches shall be backfilled with native materials.

## 4. Concrete

- a. Concrete per WI DOT Specifications; shall be used for incidental concrete work. Ready-mix concrete is acceptable.
- b. Manholes and Inlets shall be grouted with concrete as listed above, on the inside and outside.
- c. Flat work, Concrete will have Nycon or similar fiber added.

## 5. Asphalt Pavement (Bituminous) (N/A)

- a. HMA Binder Type PG 58-34
- b. Cost per ton for Asphalt Pavement ( surface or binder ) shall include all materials (aggregate and bituminous materials) and labor to produce, deliver, and place the pavement.

## 6. Standards

- a. ASTM, NEMA, AWWA, ANSI and other applicable standards shall be adhered to as required by laws and codes and as listed in the Supplemental Conditions and standards sections.

## 7. Dewatering

- a. If dewatering is required, the contractor shall contact the WI DNR for required permits or regulations.
- b. If dewater pumping exceeds 70 (gpm) the Contractor may be required to notify the WI DNR

## 8. Utilities

- a. Contractor shall call DIGGER's Hotline; prior to beginning work.
- b. Contractor shall coordinate utility relocations with Utility Companies.

## 9. General

- a. All materials supplied shall have certifications provided by the supplier to the Engineer. The certifications shall state compliance with applicable codes and standards.
- b. All manufacturers procedures shall be followed unless the Engineer authorizes deviation.



## 10. Soil Borings

- a. Soil Borings have been performed for this project.
- b. The Report Boring Logs is included in **Appendix J**.

## 11. Traffic Control

- a. Shall meet MUTCD requirements.
- b. Local traffic shall have access on gravel @ all times.
- c. Advance warning signs shall be placed when roads are under construction.
- d. Construction zone signs shall be in place for duration of construction.

## 12. Notifications

- a. Contractor shall notify (24 hours in advance) businesses and residences if their traffic flow will be affected by the Contractor.
- b. Contractor shall notify (48 hours in advance) affected water customers prior to shutting off the water.

## 13. Salvaging Materials

- a. Existing castings and hydrants shall be salvaged for the Owner.
- b. Existing asphaltic pavement (hot-mix) shall be salvaged and reused on the project if possible.
- c. Existing gravel shall be salvaged for use by the Contractor. The Engineer will evaluate acceptance of any excess for use on the Project, during construction.



**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**

**TECHNICAL SPECIFICATIONS**

**B. REFERENCE SPECIFICATIONS**

The following documents are included and made part of the project requirements by this reference:

- 1) WI DOT Standard Specifications for Road and Bridge Construction 2022 edition.
- 2) WI DNR Construction Site Best Management Practices, and Technical Specifications.
- 3) WI Administrative Code
- 4) Wisconsin State Law and Administrative Codes.
- 5) AASHTO Policy on Geometric Design of Highways & Streets, 2002 (and subsequent updates)
- 6) US DOT Manual on Uniform Traffic Control Devices, Millennium Edition
- 7) Standard Specifications for Sewer and Water construction in Wisconsin 6th edition, with Addendum No. 1, & No. 2 (and subsequent updates).
- 8) PBSD - Ordinance & Standards.



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IA)

DATE: Feb 05, 2016

TO: Pikes Bay Sanitary District #1 (PBSD) Board

FR: Randy M. Lund, PE

RE: PBSD Standard Connection Specifications

The following specification document is intended to be a summary of applicable state, local, and PBSD specifications; to be utilized for making connections to the PBSD Sanitary Sewer System.

There are 2 main types of connections to the PBSD System, (which includes the Greater Bayfield Waste Water Treatment Plant Commission (GBWWTPC) force main (FM)).

- A) Pressure; connections to the GBWWTPC FM (running along STH 13, and Old San Road) and connections to the Orchard Lane FM.
- B) Gravity; connections to the PBSD gravity lines (running along CTH J, Trailer Court Rd, the Brownstone Trail, Chequamegon Road, and Port Superior Road).

Reference shall be made to the following documents: (which shall be incorporated and become part of the PBSD Standard Connections Specification). All reference documents shall include the latest amendments and updates.

- 1) The PBSD Ordinance, as adopted and as amended.
- 2) State of Wisconsin (WI) Plumbing Codes SPS 305, 381-387, & 391.
- 3) WI SPS Private On-Site Wastewater Treatment Systems (P.O.W.T.S.) Component Manuals.
- 4) Standard Specifications for Sewer and Water Construction in Wisconsin, Sixth Edition, with amendments.
- 5) WI Department of Transportation (WI DOT) 2016 Standard Specifications.
- 6) WI State Statutes (SS) Chapter 16, 145, and 443.
- 7) National Fire Protection Association (NFPA) Chapter 13D.
- 8) GBWWTPC original construction specifications (2005-2006) standards & ordinances and City of Bayfield standard specifications and requirements, as applicable.
- 9) Bayfield County Zoning Codes, Section 15.
- 10) Town of Bayfield, roadway and work in R/W permitting requirements.
- 11) Environment One (EONE) pumps and controls, shall be the base specification to reference when evaluating OR EQUAL pumps.

The PBSD Standard Connection Specification shall include the above listed general reference documents; as well as the following specific requirements:

- A) Pressure Connections.



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IA)

- 1) A standard curb stop valve shall be set at a 7' depth; adjacent to the R/W or easement for the property to be connected.
- 2) HDPE (minimum 160 psi rating) or Schedule 80 PVC piping shall be utilized. Piping shall be a minimum of 1.5" for grinder pump discharges, or effluent only discharges and 2" for non-grinder sewage pump discharges.
- 3) A shut off valve shall be placed next to, or within the pumping chamber or tank. This valve shall be fixed to the chamber wall, such that it will always be in place, whether the pump is in place or removed from the system, for maintenance.
- 4) All building gravity lines shall incorporate a mechanical back flow check valve, placed prior to the pumping chamber or tank.
- 5) All pump chambers or tanks shall have guide rails and / or a quick disconnect mechanism to allow the pump to be removed for maintenance or inspection; WITHOUT confined space entry (per OSHA requirements).
- 6) All pumps shall be secured with stainless steel (SS) chains and have a positive method to keep the pump in place, if guiderails are NOT utilized.
- 7) All pumps shall have control panels to operate the system automatically.
- 8) All grinder pumps shall be EONE grinder pumps, or EQUAL as determined by PBSO.
- 9) Non-grinder pumps are NOT recommended, but will be evaluated for special circumstances.
- 10) All pumps shall have a check valve and vacuum valve, as part of the pump system, OR mounted to the pump chamber or tank.
- 11) Pump sizing calculations shall be submitted for review and shall take into account the City of Bayfield pump station, with pumps on and with pumps off.
- 12) Live taps of the GBWWTPC FM are possible under special review. There are existing connections points along the GBWWTPC FM where stubs and valves are in place, to allow connections which have NOT under pressure.
- 13) All pump chamber or tank fittings and valves shall be Brass or Stainless Steel.

## B) Gravity

- 1) All gravity lines shall be PVC (SDR 35 minimum), or HDPE.
- 2) Manholes (MH's) and cleanouts (CO's) shall be placed per code.
- 3) All connections to gravity lines shall utilize in line wyes / tees or by utilizing full pipe saddles with SS bands.
- 4) Service Connections directly to MH's will NOT be permitted.
- 5) Proper bury depth or insulation will be required per codes and specifications.

## C) General

- 1) All connections will be reviewed by PBSO, as part of the service connection application process.
- 2) All connections will be inspected by PBSO, during installation
- 3) All roadways shall be repaired in kind.
- 4) All permits (State, County, Local Gov.) must be in place and provided to PBSO, prior to commencing any work.



## **Lower Lift Station (LS) – Force Main (FM) Project**

### **TECHNICAL SPECIFICATIONS**

#### **C. STANDARDS**

ASTM D 2487	-	Classification of Soils for Engineering Purposes
ASTM D 2922	-	Nuclear Methods Density Testing
ASTM D 3017	-	Soil Testing Moisture Content
ASTM D 1557	-	Soil Testing Moisture-Density
ASTM D 698	-	Soil Testing Moisture-Density
ASTM D 2321	-	Underground Flexible Sewer Pipe
ASTM D 1785	-	PVC Pipe, Schedule 40, 80, 120
ASTM C 94	-	Ready-Mixed Concrete
ASTM D 3261/ D 2657	-	HDPE 3408 Force main Fittings / Joints, fused
ASTM F 714	-	HDPE 3408 Force main
ASTM D 2241 / AWWA C-900	-	PVC Force main
ASTM D 3034	-	PVC Sewer Pipe/Fittings
ASTM C 923	-	Manhole Connections
ASTM F 477	-	Gaskets
ASTM F 679	-	PVC Sewer Pipe/Fittings
ASTM F 789	-	PVC Sewer Pipe/Fittings
ASTM D 2241	-	PVC (SDR-PR)
ASTM D 2564	-	PVC Solvent weld Joints
ASTM D 3212	-	PVC Joints
ASTM C 443, C 990, C 923, C 425	-	Sanitary Manholes, Joints



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

AWWA C-900 C-905	-	PVC Water Pipe
ANSI/AWWA C 153/A 21.53 C 116 / A 21.18	- for Water and Other Liquids.	Ductile-Iron and Gray-Iron Fittings, 3 in. Through 48 in.,
ANSI/AWWA C 111/A 21.11 C 110	- Pressure	Rubber-Gasket Joints for Ductile-Iron and Gray-Iron Pipe and Fittings.
ANSI/AWWA C 151 / A 21.51 C150 / A 21.50	- Liquids.	Ductile-Iron Pipe, Centrifugally Cast, for Water or Other
ASTM C1116	-	Fibrous Reinforcing for Concrete
ANSI B 16.1 / B 16.5	-	Mechanical Joints
AWWA C-800 / ASTM B-62	-	Corp. Stops & Curb Stops
ASTM A 48 Cl. 20	-	Cast Iron Service Boxes
AWWA C 500 / C 502	-	Gate Valves / Fore Hydrants
AWWA C 105 / ANSI A 21.5	-	Poly. Wrap
AWWA C 901 / ASTM D 2737	-	Water Tubing

ANSI American National Standards Institute  
1430 Broadway  
New York, NY 10018

ASTM American Society for Testing and Materials  
1916 Race Street  
Philadelphia, PA 19103

EJCDC Engineers' Joint Contract Documents Committee  
American Consulting Engineers Council  
1015 15th Street, N.W.  
Washington, DC 20005

NEMA National Electrical Manufacturers' Association  
2101 "L" Street, N.W.  
Washington, DC 20037



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

## Lower Lift Station (LS) – Force Main (FM) Project

### TECHNICAL SPECIFICATIONS

#### **D. DETAILS**

1. General (also see plans)
2. WI DOT Standard Specifications
3. Standard Spec's. for Sewer and Water



## WASTEWATER AIR/VACUUM VALVE Val-Matic Specification

### 1 Scope

1.1 This specification is intended to cover the design, manufacture, and testing of 1 in. (25 mm) through 8 in. (200 mm) Wastewater Air/Vacuum Valves suitable for pressures up to 150 psig (1000 kPa).

1.2 Wastewater Air/Vacuum valves shall be fully automatic float operated valves designed to exhaust large quantities of air during the filling of a piping system and close upon liquid entry. The valve shall re-open during draining or if a negative pressure occurs. [NOTE: See Wastewater Air Release Valves for releasing air during system operation and Wastewater Combination Air Valves for both air release and air/vacuum functions.]

### 2 Standards, Approvals and Verification

2.1 Valves shall be manufactured and tested in accordance with American Water Works Association (AWWA) Standard C512.

2.2 Manufacturer shall have a quality management system that is certified to ISO 9001 by an accredited, certifying body.

### 3 Connections

3.1 Valve sizes 3 in. (75 mm) and smaller shall have full size NPT inlets and outlets equal to the nominal valve size with a 2 in. (50 mm) inlet on 1 in. (25 mm) valves. The body inlet connection shall be hexagonal for a wrench connection. The valve body shall have 2" NPT cleanout and 1" NPT drain connections on the side of the casting.

3.2 Valve sizes 4 in. (100 mm) and larger shall have bolted flange inlets with NPT outlets. Flanges shall be in accordance with ANSI B16.1 for Class 125 iron flanges.

3.3 The valve shall have three additional NPT connections for the addition of backwash accessories.

### 4 Design

4.1 The extended valve body shall provide a through flow area equal to the nominal valve size. A bolted cover with alloy screws and flat gasket shall be provided to allow for maintenance and repair.

4.2 Tandem floats shall be unconditionally guaranteed against failure including pressure surges. The float assembly shall have a hexagonal guide shaft supported in the body by circular bushings to prevent binding from debris. The upper float shall be protected against direct water impact by an internal baffle.

4.3 The resilient seat shall provide drop tight shut off to the full valve pressure rating. The seat shall be a minimum of .5 in. (12 mm) thick on 2 in. (50 mm) and larger valves and secured in such a manner as to prevent distortion.

4.4 On valve sizes 4 in. (100 mm) and larger, the cover shall be fitted to the valve body by means of a machined register to maintain concentricity between the top and bottom guide bushings at all times. The tandem float shall be double guided with a guide shaft extending through the float. A resilient bumper shall be provided to cushion the float during sudden opening conditions.

### 5 Materials

5.1 The valve body, cover, and baffle shall be constructed of ASTM A126 Class B cast iron.

5.2 The float, guide shafts, and bushings shall be constructed of Type 316 stainless steel. Non-metallic guides and bushings are not acceptable. Resilient seats shall be Buna-N.

### 6 Options

6.1 A flanged or screwed outlet connection shall be provided when specified for vault piping.

6.2 An optional Regulated Exhaust Device shall be provided when specified to reduce pressure surges due to column separation or rapid changes in velocity and pressure in the pipeline.

6.2.1 The Regulated Exhaust Device shall be mounted on the outlet of the Wastewater Air/Vacuum Valve, allow free air flow in and out of the valve, close upon rapid air exhaust, and control the air exhaust rate to reduce pressure surges.

6.2.2 The device shall have a threaded or flanged globe-style body with a center guided disc and seat assembly. The disc shall have threaded holes to provide adjustment of the air exhaust rate through the valve. The holes shall provide for a flow area of 5% of the nominal valve size.

6.2.3 The material of the body shall be consistent with the Air Valve. The seat and disc shall be ASTM A351 Grade CF8M stainless steel.

6.3 Backwash accessories shall be furnished when specified and shall consist of an inlet shut-off valve, a blow-off valve, a clean water inlet valve, rubber supply hose, and quick disconnect couplings. Accessory valves shall be quarter-turn, full ported bronze ball valves.

6.4 Optional body materials include ASTM A536 Grade 65-45-12 ductile iron, ASTM A351 Grade CF8M stainless steel, and ASTM B584 Alloy C83600 cast bronze.

6.5 Valve interiors and exteriors shall be coated with an NSF/ANSI 61 certified fusion bonded epoxy in accordance with AWWA C550 when specified.

6.6 Low Durometer seat shall be furnished for low pressure applications

### 7 Manufacture

7.1 The manufacturer shall demonstrate a minimum of five (5) years experience in the manufacture of wastewater air valves. When requested, the manufacturer shall provide test certificates, dimensional drawings, parts list drawings, and operation and maintenance manuals.

7.2 The exterior of the valve shall be coated with a universal alkyd primer.

7.3 Wastewater Air/Vacuum Valves shall be Series 300 as manufactured by Val-Matic Valve and Manufacturing Corporation, Elmhurst, IL, USA or approved equal.

Revised 3-29-16

## WASTEWATER AIR/VACUUM VALVE SPECIFICATION

DATE 6-7-06



VALVE AND MANUFACTURING CORP.

DRWG. NO.

VM-300-S



WASTEWATER AIR/VACUUM VALVE  
1"- 3" SERIES NO. 300AS (THREADED STYLE)

STANDARD MATERIALS OF CONSTRUCTION

(ALL STAINLESS STEEL)

<u>PART NO.</u>	<u>PART NAME</u>	<u>MATERIAL</u>
1	BODY	STAINLESS STEEL ASTM A351, GRADE CF8M
2	COVER	STAINLESS STEEL ASTM A351, GRADE CF8M
3	BAFFLE	STAINLESS STEEL ASTM A351, GRADE CF8M
4	SEAT	BUNA-N
5	FLOAT	STAINLESS STEEL T316, ASTM A240
5L	FLOAT	STAINLESS STEEL T316, ASTM A240
6	GASKET	COMPRESSED NON-ASBESTOS FIBER
7	COVER BOLT	STAINLESS STEEL T316, ASTM F593
8	RETAINING SCREW	STAINLESS STEEL T316, ASTM F593
9	GUIDE BUSHING	STAINLESS STEEL T316, ASTM A582
14	PIPE PLUG	STAINLESS STEEL
20	GUIDE SHAFT	STAINLESS STEEL T316, ASTM A582
28	PIPE PLUG	STAINLESS STEEL
36	PIPE PLUG	STAINLESS STEEL

NOTE: ALL SPECIFICATIONS AS  
LAST REVISED.

MATERIALS OF CONSTRUCTION

DATE 11/5/09

**VAL-MATIC<sup>®</sup>** VALVE AND MANUFACTURING CORP.

DRWG. NO.  
VM-301AS-M



MUELLER WATER PRODUCTS



(/)



en

- [WATER WORKS \(/WATER-WORKS/\)](#)[FIRE PROTECTION \(/FIRE-PROTECTION/\)](#)
- [SERVICES \(/SERVICES/\)](#)[SALES \(/SALES/\)](#)[SUPPORT \(/SUPPORT/\)](#)
- [COMPANY \(/COMPANY/\)](#)[CONTACT \(/CONTACT/\)](#)

Home (/) / Water Works (/water-works/) / Valves (/water-works/valves/) / Resilient Wedge Gate Valves (/water-works/valves/resilient-wedge-gate-valves/) / RESILIENT WEDGE GATE VALVES with HYMAX Grip® Restraint



RESILIENT WEDGE GATE VALVES WITH  
HYMAX GRIP® RESTRAINT

The HYMAX Grip® Restraint is now offered on 4"-12" A-2361 Mueller Resilient Wedge Gate Valves and Super Centurion® 250 Fire Hydrants. This versatile, single-bolt restraint is capable of joining a wide selection of pipe types and diameters, resulting in easier, more flexible installations.

FEATURES

- EASY INSTALLATION
  - No assembly required
  - Stab-fit design
  - Easy-to-access top-facing bolt
  - Pressure-assist gasket and restraint technology
- FLEXIBILITY
  - Joins and restrains pipes of different types & diameters
  - Works with Ductile Iron, Gray Iron, PVC, and HDPE
  - Dynamic deflection up to 4 degrees per grip joint end
- CONFIGURATIONS
  - A-2361 RESILIENT WEDGE GATE VALVE
    - Sizes 4" - 12"
    - Hymax Grip x Hymax Grip and Hymax Grip x Flange
    - ANSI/AWWA C515 Rated to 250 PSIG
    - Certified to ANSI/NSF 61 and 372

PRODUCT RESOURCES

- Technical



- MUELLER WATER PRODUCTS
- Product Specifications
    - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14373\\_mueller\\_rwgv\\_and\\_hydrant\\_certificate\\_of\\_compliance.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14373_mueller_rwgv_and_hydrant_certificate_of_compliance.pdf))
    - Certificate of Compliance
      - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/mueller\\_rwgv\\_with\\_grip\\_certificate.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/mueller_rwgv_with_grip_certificate.pdf))
    - Submittal Print: 7618: A-2361
      - RWGV 250 with Hymax Grip Restraint
        - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/mueller\\_rwgv\\_with\\_grip\\_submittal\\_print.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/mueller_rwgv_with_grip_submittal_print.pdf))
  - Installation & Operation
    - Installation Guide
      - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14454\\_mueller\\_rwgv\\_and\\_hydrant\\_installation\\_guide.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14454_mueller_rwgv_and_hydrant_installation_guide.pdf))
    - Installation Preparation checklist (generic)
      - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/11624\\_valve\\_installation\\_preparation\\_checklist\\_generic.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/11624_valve_installation_preparation_checklist_generic.pdf))
    - Operating Manual 2300 Series RWGV (generic)
      - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/12661\\_2300\\_rwgv\\_operations\\_manual.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/12661_2300_rwgv_operations_manual.pdf))
  - Sales
    - Brochure
      - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14372\\_mueller\\_rwgv\\_and\\_hydrant\\_sales\\_brochure.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14372_mueller_rwgv_and_hydrant_sales_brochure.pdf))
    - 1-Page Flyer
      - ([https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14371\\_mueller\\_rwgv\\_and\\_hydrant\\_1\\_page\\_flyer.pdf](https://www.muellercompany.com/sites/muellercompany.com/files/uploads/media/14371_mueller_rwgv_and_hydrant_1_page_flyer.pdf))
  - Reference Sources
    - Super Centurion Fire Hydrant
      - (<https://www.muellercompany.com/water-works/hydrants/fire-hydrants/super-centurion/>)
    - HYMAX Grip Restraint
      - (<https://krauszusa.com/products-main/hymax-grip-wide-range-restraint-couplings>)

FULL LINE CATALOG  
([HTTPS://IPAPER.IPAPERCMS.DK/MUELLERCO/MUELLER-WATER-DISTRIBUTION-PRODUCTS-CATALOG/10-GATE-VALVES/10-GATE-VALVES/?PAGE=10](https://ipaper.ipapercms.dk/muellerco/mueller-water-distribution-products-catalog/10-GATE-VALVES/10-GATE-VALVES/?PAGE=10))



(/)  
**QUICK LINKS**

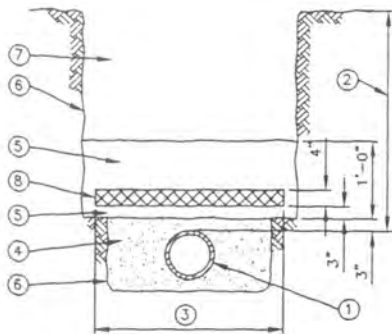
- Sales (/sales/)
- Support (/support/)
- Company (/company/)
- Contact (/contact/)



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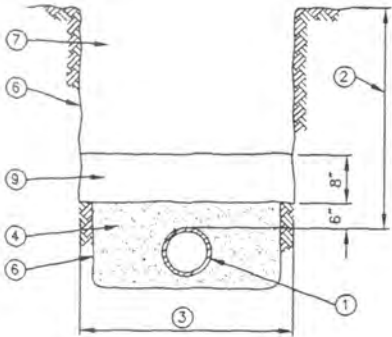




RIGID INSULATION

- ① WATER MAIN
- ② COVER, 4.5' MINIMUM
- ③ O.D. + 24"
- ④ BEDDING
- ⑤ MASON SAND
- ⑥ TRENCH WALL
- ⑦ BACKFILL
- ⑧ CLOSED CELL EXTRUDED POLYSTYRENE FOAM BOARDS
- ⑨ 1:8 MIX PERLITE OR VERMICULITE CONCRETE

NOTE: IF ② IS LESS THAN 4.5:  
EXTEND ⑧ DOWN BOTH SIDES  
TO PIPE FLOWLINE.



INSULATING CONCRETE

NOTES:

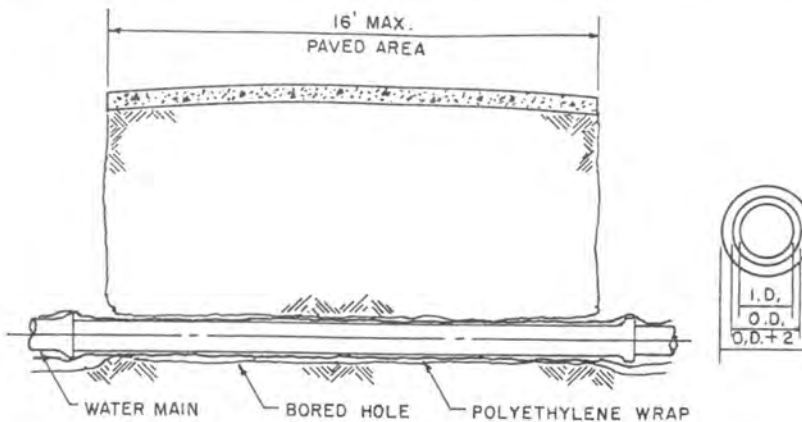
- 1. POLYETHYLENE FILM ENVELOPE NOT SHOWN.
- 2. WHEN INSULATING CONCRETE IS USED, 8" ENCASEMENT OF THE PIPE MAY BE USED AS AN ALTERNATIVE INSTALLATION WITH APPROVAL OF THE ENGINEER.

PIPE INSULATION DETAILS

NOT TO SCALE  
JAN 1999

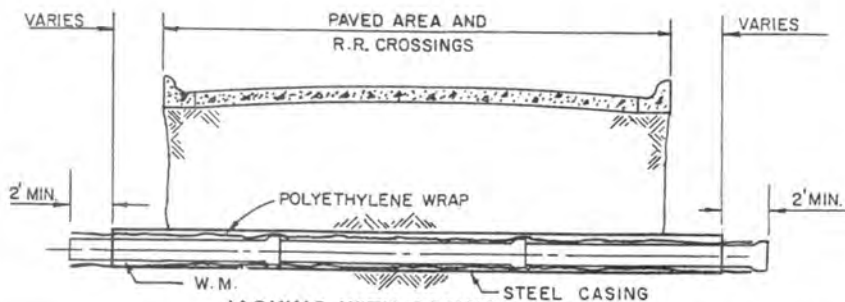
FILE NO. 48





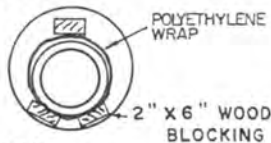
PLACE BEDDING BEFORE PUSHING PIPE, BACKFILL BETWEEN W.M. AND BORED HOLE BY PUMPING OR BLOWING IN SAND. NO JOINTS PERMITTED WITHIN THE BORE.

#### BORING WITHOUT CASING PIPE



#### JACKING WITH CASING PIPE

STEEL CASING PIPE ASTM A-53 GRADE B 35,000 PSI. MIN. YIELD			
SIZE W.M.	CASING MIN. WALL	CASING MIN. DIA.	NOTE
6"	0.312	18"	12" THICK CONC. OR BRICK BULKHEADS REQUIRED (2) ONLY IN R.R. R.O.W.S UNLESS OTHERWISE NOTED ON THE PLAN
8"	0.312	18"	
12"	0.406	24"	
16"	0.469	30"	
20"	0.563	36"	
24"	0.563	42"	



REF: CHAP. 4.13.0

#### BORING OR JACKING WITH CASING PIPE

NOT TO SCALE  
MARCH 1980

FILE NO. 49



**Pikes Bay Sanitary District #1 (PBSD)**  
Lower Lift Station (LS) – Force Main (FM) Project

**TECHNICAL SPECIFICATIONS**

**E. PERMITS**

1. This Project is to be funded by **Pikes Bay Sanitary District #1 (PBSD)**
2. Coordination with the WI DNR is ongoing, as required.
  - a. The Wetland Impact permit is in place.
  - b. Standard Wastewater permits will be obtained, in the near future, prior to the commencement of construction.

Specific permits follow this page, if issued by regulatory agencies.





DEPARTMENT OF THE ARMY  
U.S. ARMY CORPS OF ENGINEERS, ST. PAUL DISTRICT  
180 FIFTH STREET EAST, SUITE 700  
ST. PAUL, MN 55101-1678

October 12, 2021

Regulatory File 2015-01965-KME

Randy Lund  
Lund Engineering  
PO Box 243  
Washburn, Wisconsin 54891

Dear Mr. Lund:

We are responding to your request for authorization to replace the Pikes Bay Sanitary District's Lower Lift Station Force Main. The proposed work is located in Section 22, Township 50 North, Range 4 West, Bayfield County, Wisconsin.

The regulated activity associated with the project described above includes the temporary discharge of dredged and fill material into 0.46 acres of wetlands for the installation of a new force main. Once installed the trench will be backfilled with bedding and native material. All surface land and wetland soils will be restored to a pre-existing condition. The work appears to be authorized by a Nationwide Permit (NWP) and/or a Regional General Permit (RGP), specifically, the Utility RGP. No application or notification to the St. Paul District Corps of Engineers is required for your project.

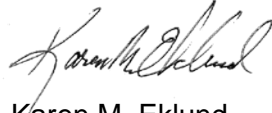
This letter does not verify permit eligibility but indicates that your project may meet the requirements of this permit. It is your responsibility to ensure that the work is performed in accordance with the terms and general conditions of this permit before starting work. **It is also incumbent upon you to verify that your activity has received any necessary Water Quality Certification or waiver prior starting work in waters of the U.S.** If a Water Quality Certification has not been issued for your activity, you are responsible for contacting the certifying agency. A full list of applicable terms, conditions, issued Water Quality Certifications, and certifying agencies may be found by visiting our website at <http://www.mvp.usace.army.mil/Missions/Regulatory/>.

A change in location or project plans may require re-evaluation of your project. Proposed changes should be coordinated with this office prior to construction. Failure to comply with all terms and conditions of this permit invalidates this authorization and could result in a violation of Section 301 of the Clean Water Act or Section 10 of the Rivers and Harbors Act. You must also obtain all local, State, and other Federal permits that apply to this project.

If you have any questions, please contact me in our Hayward office at (651) 290-5883 or by email at [karen.m.eklund@usace.army.mil](mailto:karen.m.eklund@usace.army.mil).



Sincerely,

A handwritten signature in black ink, appearing to read "Karen M. Eklund". The signature is fluid and cursive, with the first name "Karen" being more prominent.

Karen M. Eklund  
Regulatory Specialist

CC:

Steve LaValley, Wisconsin DNR, [Steven.LaValley@wisconsin.gov](mailto:Steven.LaValley@wisconsin.gov)



**From:** Annie Key <ann@wetlandsandwater.com>  
**Sent:** Friday, November 5, 2021 12:09 PM  
**To:** Steve  
**Cc:** Randy; Rex Dollinger; ajlong@pbsdwi.com  
**Subject:** PBSO Lower LS Force Main Replacement - Endangered Species Assessment  
**Attachments:** Wetland Delineation Report Pikes Bay Sanitary.pdf; Untitled attachment 00316.htm  
  
**Flag Status:** Flagged

Hi Steve,

The Pikes Bay Sanitary District LS Force Main Replacement project in Bayfield County has been working with you on permitting for the project and through that process was notified of some Endangered, Threatened and Special Concern species that could potentially be present including Tea-Leaved Willow, Auricled Twayblade and Marsh Horsetail. As you and I discussed, the timing for 2021 review would have missed the window of opportunity to view the Auricled Twayblade and Marsh Horsetail, and potentially the Willow as well. However, on June 1, 2020 I conducted a wetland delineation of the area and as the delineation was conducted within the prime growing season and within a narrow corridor, the above mentioned species would have certainly been observed if present. Based on the thorough vegetation survey conducted at that time it would indicate these species are not present within the project area.

For your reference, the wetland delineation report with a full vegetation list including both upland and wetland dominant and non-dominant species observed is attached below. The vegetation lists are included on pages 8 through 10.

Please confirm if this suffices to address any concerns of the presence of the species mentioned. Thanks and have a great weekend!

Ann



State of Wisconsin  
DEPARTMENT OF NATURAL RESOURCES  
1701 North Fourth Street  
Superior, WI, 54880

Tony Evers, Governor  
Preston D. Cole, Secretary  
Telephone 608-266-2621  
Toll Free 1-888-936-7463  
TTY Access via relay - 711



October 6, 2021  
Randy Lund  
PO Box 243  
Washburn, WI 54891

GP-NO-2021-4-03708

RE: Coverage under the wetland statewide general permit to temporarily impact 0.46 acres of wetland for municipal activities, located in the Town of Bayfield, Bayfield County, docket GP-NO-2021-4-03708.

Dear Mr. Lund:

Thank you for submitting an application for a General Permit to temporarily impact 0.46 acres of wetlands for municipal activities located in the SE 1/4, SW 1/4, Sec. 22, T. 50, R. 04W, Town of Bayfield, Bayfield County.

You have certified that your project meets the eligibility criteria for this activity. Based upon your signed certification you may proceed with your project. Please take this time to re-read the permit standards and conditions. The eligibility standards can be found on your application checklist or in the statewide general permit (found at <http://dnr.wi.gov/topic/waterways/> - keyword: general permits). The permit conditions are attached to this letter. **You are responsible for meeting all general permit eligibility standards and permit conditions.** This includes notifying the Department before starting the project and submitting photographs within one week of project completion. Please note your coverage is valid for 5 years from the date of the department's determination or until the activity is completed, whichever occurs first.

The NHI review recommends that the work area be surveyed for three endangered plant before work. The Municipal wetland General permit requires a restoration and monitoring plan for temporary impacts. Please send a copy of the plan.

The Department conducts routine and annual compliance monitoring inspections. Our staff may follow up and inspect your project to verify compliance with state statutes and codes. If you need to modify your project please contact your local Water Management Specialist, Steven LaValley at (715) 392-0803 or email [Steven.LaValley@wisconsin.gov](mailto:Steven.LaValley@wisconsin.gov) to discuss your proposed modifications.

The Department of Natural Resources appreciates your willingness to comply with wetland regulations, which help to protect the water quality, fish and wildlife habitat, recreational value and other functions and values wetlands provide to current and future generations. You are responsible for obtaining any other local, state or federal permits that are required before starting your project.

Sincerely,

Steven LaValley  
Water Management Specialist

Copy to:

Jonathan Bakken - USACE Project Manager  
Richard Schierman - Bayfield County Zoning Administrator  
Amy Egstad - DNR



You agree to comply with the following conditions:

1. **Application.** You shall submit a complete application package to the Department as outlined in the application materials and Section 2 of this permit. If requested, you shall furnish the Department, within a reasonable timeframe, any information the Department needs to verify compliance with the terms and conditions of this permit.
2. **Certification.** Acceptance of general permit WDNR-GP11-2015 and efforts to begin work on the activities authorized by this general permit signifies that you have certified the project meets all eligibility standards outlined in Section 1 of this permit and that you have read, understood and have agreed to follow all terms and conditions of this general permit.
3. **Reliance on Applicant's Data.** The determination by this office that confirmation of authorization is not contrary to wetland water quality standards will be based upon the information provided by the applicant and any other information required by the Department.
4. **Project Plans.** This permit does not authorize any work other than what is specifically described in the notification package and plans submitted to the Department and you certified is in compliance with the terms and conditions of WDNR-GP11-2015.
5. **Expiration.** This WDNR-GP11-2015 expires on February 20, 2020. The time limit for completing work authorized by the provisions of WDNR-GP11-2015 ends 5 years after the date on which the discharge is considered to be authorized under WDNR-GP11-2015 or until the discharge is completed, whichever occurs first.
6. **Other Permit Requirements.** You are responsible for obtaining any other approvals required by other state agencies, local ordinances, the US Army Corps of Engineers, or any other federal agency before starting your project.
7. **Authorization Distribution.** You must supply a copy of the permit coverage authorization to every contractor working on the project.
8. **Project Start.** You shall notify the Department before starting construction.
9. **Permit Posting.** You must post a copy of this permit coverage letter at a conspicuous location on the project site before beginning the permitted activity, and keep it posted until five (5) days after the area of the permitted activity has been stabilized. You must also have a copy of the permit coverage letter and approved plan available at the project site at all times until the project is complete.
10. **Permit Compliance.** The department may modify or revoke coverage of this permit if the project is not constructed or carried out in compliance with the terms and conditions of this permit, or if the Department determines the project will be detrimental to wetland water quality standards. Any act of noncompliance with this permit constitutes a permit violation and is grounds for enforcement action. Additionally, if any applicable conditions of this permit are found to be invalid or unenforceable, authorization for all activities to which that condition applies is denied.
11. **Construction Timing.** Once wetland work commences, all wetland construction activities must be continuous until the permitted activity is completed, and the site is stabilized.
12. **Construction.** No other area of the wetland may be disturbed beyond the area designated in the submitted plans and approved by coverage granted under this permit.
13. **Project Completion.** Within one week of completing the regulated activity, you shall submit to the Department photographs of the activities authorized by this permit and a statement certifying the project complies with all the terms and conditions of this permit and. The statement must reference the Department-issued docket number and must be submitted to the Department staff member that authorized coverage.



14. **Proper Maintenance.** You must maintain the activity authorized by WDNR-GP11-2015 in good condition and in conformance with the terms and conditions of this permit using best management practices. Any structure or fill authorized shall be properly maintained to ensure no additional impacts to the remaining wetlands.
15. **Site Access.** Upon reasonable notice, you shall allow access to any privately owned area of the site to any Department employee who is investigating the project's construction, operation, or maintenance or its compliance with the terms and conditions of WDNR-GP11-2015 and applicable laws.
16. **Erosion and Sediment Control Practices.** The project site shall implement erosion and sediment control measures that adequately control or prevent erosion and prevent damage to waterways and wetlands as outlined in NR 151.11(6m), Wis. Adm. Code.
17. **Invasive Species.** All project equipment shall be decontaminated for removal of invasive species prior to and after each use on the project site by utilizing other best management practices to avoid the spread invasive species as outlined in ch. NR 40, Wis. Admin. Code. For more information, go to <http://dnr.wi.gov/topic/invasives/bmp.html>.
18. **Federal and State Threatened and Endangered Species.** WDNR-GP11-2015 does not affect the Department's responsibility to ensure that all authorizations comply with Section 7 of the Federal Endangered Species Act and s. 29.604, Wis. Stats., and any other applicable state laws. No DNR authorization under this permit will be granted for projects found not to comply with these Acts/laws. No activity is authorized which is likely to jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act and/or State law or which is likely to destroy or adversely modify the critical habitat of a species as identified under the Federal Endangered Species Act.
19. **Special Concern Species.** If the Wisconsin National Heritage Inventory lists a known special concern species to be present in the project area you will take reasonable action to prevent significant adverse impacts or to enhance the habitat for the species of concern.
20. **Historic Properties and Cultural Resources.** WDNR-GP11-2015 does not affect the Department's responsibility to ensure that all authorizations comply with Section 106 of the National Historic Preservation Act and s. 44.40, Wis. Stats. No Department authorization under this permit will be granted for projects found not to comply with these Acts/laws. Information on the location and existence of historic resources can be obtained from the State Historic Preservation Office and the National Register of Historic Places. If cultural, archaeological, or historical resources are unearthed during activities authorized by this permit, work must be stopped immediately, and the State Historic Preservation Officer must be contacted for further instruction.
21. **Preventive Measures.** Measures must be adopted to prevent potential pollutants from entering a wetland or waterbody. Construction materials and debris, including fuels, oil, and other liquid substances, will not be stored in the construction area in a manner that would allow them to enter a wetland or waterbody as a result of spillage, natural runoff, or flooding. If a spill of any potential pollutant should occur, it is your responsibility to remove such material, to minimize any contamination resulting from this spill, and to immediately notify the State Duty Officer at 1-800-943-0003.
22. **Suitable fill material.** All fill authorized under this permit must consist of clean suitable soil material, as defined by s. NR 500.03(214), Wis. Admin. Code, free from hazardous substances as defined by s. 289.01(11), Wis. Stats., free from solid waste as defined by s. 289.01(33), Wis. Stats.
23. **Property Rights.** This permit does not convey any property rights of any sort, or any exclusive privilege. The permit does not authorize any injury or damage to private property or any invasion of personal rights, or any infringement of federal, state or local laws or regulations.
24. **Transfers.** Coverage under this permit is transferable to any person upon prior written approval of the transfer by the Department.



25. **Limits of State Liability.** In authorizing work, the State Government does not assume any liability, including for the following:
- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
  - b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the State in the public interest.
  - c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
  - d. Design or construction deficiencies associated with the permitted work.
  - e. Damage claims associated with any future modification, suspension, or revocation of this WDNR-GP11-2015.
26. **Reevaluation of Decision.** The Department may suspend, modify or revoke authorization of any previously authorized activity and may take enforcement action if any of the following occurs:
- a. The applicant fails to comply with the terms and conditions of WDNR-GP11-2015.
  - b. The information provided in support of the permit application proves to have been false, incomplete, or inaccurate.
  - c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.



**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**  
**TECHNICAL SPECIFICATIONS**

## **F. MANHOLES**

### 1. Manholes

- a. O-ring gaskets required for joints.
- b. E-Z stick mastic required for chimney joints.
- c. A minimum of one 2" polyethylene adjusting ring is required for sanitary manholes and one 2" concrete for storm manholes and inlets (maximum 12" of rings).
- d. Inverts shall be grouted.
- e. Integral pipe water stop boots are required at all pipe openings.
- f. Manholes shall be precast concrete, 4' min. diameter. (or per the Plans and Bid Proposal)
- g. Chimney, seals shall be included (see WI Standard Spec. details)
- h. Must use manufacturer approved sealant between rings.

### 2. Manhole Castings

- a. Casting shall be equal to Neenah R 1642 or R1550
- b. Concealed pick-holes
- c. Non-rocking
- d. Machined Fit

### 3. Price for bid item "manholes" shall include castings and covers.

### 4. Existing manholes:

- a. Modification of the existing manholes shall include excavation and coring of the walls.
- b. Backfill shall include material and placement as incidentals.
- c. The backfill shall be placed in 12" compacted lifts. Compaction methods shall result in a uniform 90% of modified proctor density throughout.

### 5. Inlets

- a. Inlets shall be 2' x 3' precast concrete.
- b. Casting shall be R-3246 with Type L covers.
- c. Adjusting rings to be grouted on inside and outside. (or sealed per manufacturers recommendations)
- d. Pipe openings shall be grouted.
- e. Fabric wraps shall be placed on outside of rings.



Lower Lift Station (LS) – Force Main (FM) Project  
**TECHNICAL SPECIFICATIONS**

**H. SANITARY SEWER**

1. Gravity Sanitary sewer shall be SDR 35 PVC pipe, with push-on joints. HDPE sewer pipe to be accepted with Engineer's Approval prior to Bidding, only.
2. Force Main sewer to be HDPE (200 psi min.) fused joint pipe. Fittings to be factory manufactured.
3. Sanitary sewers shall have 6" in-line wyes. Wye locations to be marked with 4' – 2"x4" AND 4' - #4 rebar.
4. All sanitary sewers with less than 6.0 feet of cover shall be insulated (6-12" above pipe) with 2" x 4' x 8' polystyrene boards.
5. The sanitary service shall be a 6" wye attached to the mainline sewer. The building service shall not enter directly into the manhole. Refer to WI DSPS Chap. 382-385 WI Administrative Plumbing Code.
6. Precast concrete 4' min. diameter manholes shall be used for the gravity sanitary sewer. MH's to be 5' or 6' for FM Projects. Chimney/frame seals and pipe/manhole seals (A-lok, Kor-N-Seal, or equal) shall be used. Costs are incidental to the manhole bid item.
7. Roadway patches shall utilize in-kind repairs with partial depth saw cuts. Saw cuts shall be made after trench backfill and base repair are complete.
8. Polyethylene adjusting rings shall be used. (See Details Tech. Spec.) Butyl mastic shall be used for sealing rings. Concrete rings acceptable with Engineers approval.
9. The Contractor will be responsible for confined space entry safety and adherence to OSHA regulations.
10. Casting shall be Neenah R1642 or R-1550 or equal.
11. All manhole frames shall be set to finished grade during initial construction. Temporary asphalt wedges shall be placed when the surface course placement is delayed thru the winter. This cost is incidental to the asphalt item.
12. Trenches shall be backfilled with native materials.
13. A 12" sand lift shall be placed immediately below the planned CABC, above all trenches.
14. Air / Vacuum Valves to be **VAL\_MATIC - ONE INCH (1") Series 301-AS** ( all stainless steel) or Equal
15. Gate Valves shall be **Mueller Resilient Wedge Gate Valve w/ HYMAX GRIP Restraint**, or EQUAL.



**Pikes Bay Sanitary District #1 (PBSD)**  
**Lower Lift Station (LS) – Force Main (FM) Project**

**TECHNICAL SPECIFICATIONS**

When the below items are called for in the plans and bid proposal schedule, the following specifications will govern.

**I. ROADWAY**

1. Underdrain

- a. 4" wrapped pipe underdrains shall be supplied.
- b. The underdrain shall be placed 12" behind the curb and 32" below the flowline.
- c. The underdrain shall use washed stone bedding and backfill.
- d. A 5 oz. woven geotextile shall be used as a separation fabric (Amoco 2002 or equal). The width shall extend to 2' behind the curb.
- e. The underdrain shall have access to both ends for maintenance. Either use cleanouts (behind curb) or start and end underdrain in manholes (or inlets).
- f. Connection to existing or proposed manholes/inlets is incidental to the item "4" underdrain".

2. Culverts

- a. All culverts shall have riprap w/geotextile under-liner placed at the pipe end sections.
- b. All culverts shall have end sections.
- c. HDPE culverts shall be WI DOT spec dual-walled smooth interior pipe, with a corrugated exterior.

3. Cross-section

Urban

- a. 32' to 36' face/face of curb (see plans for variations)
- b. 12" sand sub-base
- c. 8" CABC
- d. 3½ " (WI DOT) Asphalt (or 8" concrete to match existing)
- e. 0.025 cross-slope
- f. geotextile under-liner



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

## Rural

- a. 22' wide asphalt or match existing.
- b. 2' wide gravel shoulder
- c. 0.025 cross-slope
- d. 8" CABC
- e. 12" sand sub-base
- f. geotextile under-liner (if noted on plans)

## 4. Curb & Gutter

- a. 24" type D (WI DOT) (see spec. details) and/or 30" or 36" type J (WI DOT)
- b. Provide drive openings and Type 1 curb ramps at intersections.
- c. Inlet castings to be Neenah R-3246 (Type L cover) or equal.
- d. Construct per WI DOT Specs Section 601
- e. Contraction joints @10' (20 maximum and 6' minimum)
- f. Expansion joints @ 200' maximum on and at all curb radius returns

## 5. Asphalt

- a. **The surface course shall be placed after one winter season has passed.**
- b. A tack coat shall be placed prior to surface paving. The cost is incidental to the asphalt item.
- c. Temporary wedging shall be placed at all transitions from the binder course to adjacent (for the winter). This cost is incidental to the asphalt item.

## 6. Geotextiles

- a. Roadway stabilization fabric (geotextile under-liner) shall be 5 oz. woven, Type SAS (WI DOT Sec. 645) Amoco 2002 or EQUAL
- b. WI DOT Type HR for Riprap under-liner

## 7. Construction staking will include:

- a. Two project benchmarks will be set in the field by the Engineer.
- b. The C/L will be marked on the pavement outside the construction limits with PK nails.

## 8. Area Inlets

- a. 2'x3' inlet required (or 30" RCP pipe with concrete bottom).
- b. Casting shall be Neenah R-4340-B or equal
- c. An adjusting ring (4") to transition from the square inlet to the round casting is required.



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## 9. Storm sewer (HDPE)

- a. Dual-walled
- b. Smooth interior
- c. Corrugated exterior
- d. Must meet WI DOT load criteria
- e. All manhole frames shall be set to finished grade during initial construction and temporary asphalt wedges shall be placed for the winter. This is applicable when the surface course is delayed thru winter. This cost is incidental to the asphalt item.
- f. Joints shall be push-on, water-tight (gasketed)
- g. Castings to be R-1550, R1642 non-rocking concealed pick hole or R-3246 (Type L cover) if in curb and gutter.
- h. Shall meet AASHTO M 294 Type S, requirements.

## 10. Sidewalk

- a. Construct per WI DOT Specs. (Section 602)
- b. Contraction joints and expansion joints are required.
- c. To be 4" thick with 4" sand base.

## 11. Concrete (Sidewalk and Curb & Gutter and Pavement Repair)

- a. Concrete shall be air entrained (5-6%)
- b. Concrete shall use fibrous reinforcing (Nycon- Nylon 6 or equal) Fibers shall be 100% nylon filamentized fiber bundles.
- c. Fibers shall be  $\frac{3}{4}$ " long added @ one (1) pound/cy of concrete.
- d. Concrete shall meet all other requirements of WI DOT Standard Specs
- e. Materials certifications and a one (1) year warranty will be required. Weight tickets shall note the use of fibrous reinforcing.
- f. Fibers shall be per ASTM C1116
- g. Concrete strength at 28 days shall be 3500 psi minimum.
- h. Concrete must achieve 3000 psi to open to traffic.

## 12. Concrete Pavement Repair

- a. All concrete repairs shall have tie bars (#4) placed @ 3' centers in longitudinal joints.
- b. All concrete repairs shall have 1" dowel bars placed @ 1' centers in transverse joints.
- c. All drilling, epoxy grouting, tie bars, and dowel bars are incidental to the item of "Concrete Pavement".



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## 13. Concrete Pavement Removal

- a. This item is for roadway and driveway concrete removal.
- b. Sidewalk removal is incidental to pipe costs or unclassified excavation.

## 14. Topsoil (4") URBAN

- a. Salvaged topsoil may be used for the bottom 2".
- b. Screened topsoil shall be used for the top 2".
- c. The bid items; Topsoil 2" and salvaged topsoil 2" shall include topsoil as in a. and b. above.
- d. The item "Landscaping" shall include preparation, seeding, fertilizing, and mulching.
- e. Hydro-mulch (w/seed) may be used with the Engineer's approval.

## 15. Topsoil, Salvaged

- a. RURAL shall meet DOT section 625

## 16. Force Main (FM)

- a. FM shall be rated for 200 to 250 psi.
- b. FM shall meet WI Standard Spec's for Sewer & Water



# LUND ENGINEERING

Randy M. Lund, PE (WI, MN, MI, IL, IA)

## **Lower Lift Station (LS) – Force Main (FM) Project**

### **TECHNICAL SPECIFICATIONS**

#### **J. SOIL BORINGS**

  X   Soil Borings have been performed for this Project.

  X   The attached soil boring logs are provided for information only, any interpretations are the Contractor's responsibility. The boring information is for the boring location only.

A full report can be provided upon request.





**REPORT OF  
GEOTECHNICAL EXPLORATION**  
PBSD Lower Lift Station Force Main Project  
Bayfield, Wisconsin

**AET Project No. P-0009160**

**Date: September 7, 2022**

**Prepared for:**

Pikes Bay Sanitary District  
P.O. Box 689  
Bayfield, Wisconsin 54814

Geotechnical • Materials  
Forensic • Environmental  
Building Technology  
Petrography/Chemistry

**American Engineering Testing**  
4431 West Michigan Street, Suite 4  
Duluth, Minnesota 55807  
teamAET.com • 218.628.1518



September 7, 2022



Pikes Bay Sanitary District  
P.O. Box 689  
Bayfield, Wisconsin 54814

Attn: Mr. A.J. Long, President

RE: Report of Geotechnical Exploration  
PBSD Lower Lift Station Force Main Project  
Bayfield, Wisconsin  
AET Project No. P-0009160

Dear Mr. Long:

We are pleased to present the results of our subsurface exploration program for your Pikes Bay Sanitary District lower lift station force main project in Bayfield Township, Wisconsin. These services were performed according to our proposal to you dated January 25, 2022.

We are submitting an electronic (PDF) version of this geotechnical report to you. Unless you request otherwise, we will not submit any hard copies of the report.

We appreciate the opportunity to work with you on this phase of the project. Please contact us if you have questions about this report or require further assistance.

Sincerely,  
**American Engineering Testing, Inc.**

A handwritten signature in blue ink, appearing to read 'Jonathan Gabriel', is positioned above the printed name.

Jonathan Gabriel  
Duluth Manager

**4431 West Michigan Street, Suite 4 | Duluth, Minnesota 55807**  
**Phone (218) 628-1518 | (800) 972-6364 | [teamAET.com](http://teamAET.com) | AA/EEO**

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## SIGNATURE PAGE

Prepared for:

Pikes Bay Sanitary District  
P.O. Box 689  
Bayfield, Wisconsin 54814

Attn: Mr. A.J. Long, President

Prepared by:

American Engineering Testing, Inc.  
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Report Authored By:



---

Benjamin Mattson, P.E. (MN, WI)  
Senior Geotechnical Engineer

Review Conducted By:



---

Blake Snyder, P.E. (WI)  
Geotechnical Engineer







# SUBSURFACE BORING LOG

AET No: **P-0009160**

Log of Boring No. **B-1 (p. 1 of 1)**

Project: **PBSD Lower Lift Station Force Main Project; Bayfield, Wisconsin**

DEPTH IN FEET	ELEV. FEET	Surface Elevation <b>607.5</b> MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
								WC	qp	LL	PL	%-#200
1	607.0	FILL, sand with silt and gravel, fine to medium grained, brown, moist (SP-SM)	FILL	14	M	SS	12					
2	605.5	FILL, silty sand with organics, fine to medium grained, a little gravel, very dark brown, moist (SM)	BURIED TOPSOIL	8	M	SS	12					
3		SILTY SAND with organics, fine to medium grained, a little gravel, dark brown, moist, loose (SM)										
4	603.0											
5		SAND, fine to medium grained, brown, moist to waterbearing, medium dense (SP)	COARSE ALLUVIUM	13	M/W	SS	18					
6												
7												
8				22	W	SS	14					4
9												
10												
11				22	W	SS	12					
	596.0											
		End of boring at 11.5 feet										
DEPTH: DRILLING METHOD		WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG			
0-9.5'	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL				
		8/3/22	1442	11.5'	9.5'	8.1'	None	6.6'				
		8/3/22	1452	11.5'	9.5'	7.0'	None	5.1'				
BORING COMPLETED: 8/3/22												
DR: JA LG: LC Rig: 85												

AET CORP W-ELEV P-0009160.GPJ AET+CPT+WELL.GDT 9/7/22





# SUBSURFACE BORING LOG

AET No: **P-0009160**

Log of Boring No. **B-2 (p. 1 of 1)**

Project: **PBSD Lower Lift Station Force Main Project; Bayfield, Wisconsin**

DEPTH IN FEET	ELEV. FEET	Surface Elevation <b>607.8</b> MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
								WC	qp	LL	PL	%-#200
1	607.3	FILL, gravel with sand, gray and brown, moist (GP)	FILL	14	M	SS	12	90				
2	605.8	FILL, silty sand, fine to medium grained, dark brown, moist (SM)										
3		FILL, mostly sand with silt, some clayey sand, a little gravel, dark brown, moist, with trace roots		16	M	SS	16					
4	603.3											
5		ORGANIC SILT, dark brown, moist to waterbearing, very loose (OL)	SWAMP DEPOSITS	4	M	SS	16					
6	601.8											
7	600.8	Gravelly SAND WITH SILT, brown, waterbearing (SP-SM)	COARSE ALLUVIUM									
8		No recovery from 7 to 9 feet		20		SS	0					
9	598.3											
10		SAND WITH SILT, fine grained, a little gravel, brown, waterbearing, medium dense (SP-SM)		13	W	SS	12					7
11	596.3											
		End of boring at 11.5 feet										
DEPTH: DRILLING METHOD		WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG			
0-9.5'	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL				
		8/3/22	1359	11.5'	9.5'	8.0'	None	6.9'				
		8/3/22	1407	11.5'	9.5'	8.0'	None	5.8'				
BORING COMPLETED: 8/3/22												
DR: JA LG: LC Rig: 85												

AET CORP W-ELEV P-0009160.GPJ AET+CPT+WELL.GDT 9/7/22










# SUBSURFACE BORING LOG

AET No: **P-0009160**

Log of Boring No. **B-3 (p. 1 of 1)**

Project: **PBSD Lower Lift Station Force Main Project; Bayfield, Wisconsin**

DEPTH IN FEET	ELEV. FEET	Surface Elevation <u>604.7</u> MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
								WC	qp	LL	PL	%-#200
1		FILL, mix of silty sand and rip rap, brown and gray, possible fabric at about 3 feet			M	DS						
2												
3	601.7			20	M	SS	16	14				
4		LEAN CLAY with sand, brown, soft (CL)										
5				4	W	SS	9	23				
6												
7	597.7											
8	596.7	CLAYEY SAND, fine to medium grained, brown, waterbearing, loose (SC)		8	W	SS	18	18				
9	596.2	Sandy LEAN CLAY, brown (CL)										
10		SAND WITH SILT, fine to medium grained, brown, waterbearing, medium dense (SP-SM)										
11				16	W	SS	2					5
	593.2											
		End of boring at 11.5 feet										
DEPTH: DRILLING METHOD		WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG			
0-9.5' 3.25" HSA		DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL				
		8/3/22	1003	11.5'	9.5'	10.4'	None	3.4'				
BORING COMPLETED: 8/3/22												
DR: JA LG: LC Rig: 85												

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# SUBSURFACE BORING LOG

AET No: **P-0009160**

Log of Boring No. **B-4 (p. 1 of 1)**

Project: **PBSD Lower Lift Station Force Main Project; Bayfield, Wisconsin**

DEPTH IN FEET	ELEV. FEET	Surface Elevation <b>632.1</b> MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
								WC	qp	LL	PL	%-#200
1		FILL, sandy silt with organics, brown, moist (OL)	TOPSOIL/ FILL	11	M	SS	12					
2	630.1											
3		FILL, silty sand with organics, fine to medium grained, brown, moist, with some decayed wood (SM)	FILL	13	M	SS	12					
4	627.6											
5		CLAYEY SAND, fine to medium grained, brown, moist, dense (SC)	TILL	32	M	SS	17					
6	625.1											
7		SILTY SAND, fine to medium grained, brown, moist, dense, with trace roots (SM)		31	M	SS	22					
8	623.6											
9		SILTY SAND, fine to medium grained, a little gravel, reddish brown, moist, dense to very dense (SM)		40	M	SS	18					
10												
11												
12												
13				63	M	SS	18					21
14	617.6											
15		Gravelly SILTY SAND, fine to medium grained, dark reddish brown, moist, very dense (SM)		60	M	SS	20					
16	615.1											
17		SILTY SAND, fine to medium grained, a little gravel, reddish brown, moist, very dense (SM)		53	M	SS	20					
18	613.6											
19	613.1	SILTY SAND with gravel, fine to medium grained, reddish brown, moist, very dense (SM) <i>End of boring at 19.0 feet</i>										

DEPTH: DRILLING METHOD		WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-17.0'	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
		8/3/22	0900	21.5'	19.5'	19.5'	None	None	
BORING COMPLETED: 8/3/22									
DR: JA LG: LC Rig: 85									

AET CORP W-ELEV P-0009160.GPJ AET-CPT+WELL.GDT 9/7/22





# SUBSURFACE BORING LOG

AET No: **P-0009160**

Log of Boring No. **B-5 (p. 1 of 1)**

Project: **PBSD Lower Lift Station Force Main Project; Bayfield, Wisconsin**

DEPTH IN FEET	ELEV. FEET	Surface Elevation <b>644.8</b> MATERIAL DESCRIPTION	GEOLOGY	N	MC	SAMPLE TYPE	REC IN.	FIELD & LABORATORY TESTS				
								WC	qp	LL	PL	%-#200
1	642.8	FILL, silty sand, fine to medium grained, a little gravel, dark reddish brown, moist, with trace organics (SM)	FILL	8	M	SS	19					
2												
3	640.3	FILL, clayey sand, fine to medium grained, a little gravel, dark reddish brown and dark brown, moist, with trace organics (SC)		13	M	SS	18					
4												
5	637.8	FILL, silty sand, fine to medium grained, a little gravel, reddish brown, moist (SM)	TILL	21	M	SS	16					
6												
7	635.3	CLAYEY SAND, fine to medium grained, reddish brown, moist, dense (SC)		46	M	SS	18	9				
8												
9	628.3	SILTY SAND, fine to medium grained, a little gravel, dark reddish brown, moist, very dense (SM)		62	M	SS	24					17
10												
11												
12												
13				89	M	SS	18					
14												
15				72	M	SS	20					
16												
		End of boring at 16.5 feet										

DEPTH: DRILLING METHOD		WATER LEVEL MEASUREMENTS							NOTE: REFER TO THE ATTACHED SHEETS FOR AN EXPLANATION OF TERMINOLOGY ON THIS LOG
0-14.5'	3.25" HSA	DATE	TIME	SAMPLED DEPTH	CASING DEPTH	CAVE-IN DEPTH	DRILLING FLUID LEVEL	WATER LEVEL	
		8/3/22	1615	16.5'	14.5'	14.5'	None	None	
BORING COMPLETED: 8/3/22									
DR: JA LG: LC Rig: 85									

AET CORP W-ELEV P-0009160.GPJ AET+CPT+WELL.GDT 9/7/22



