



BAINBRIDGE ISLAND METRO PARK & RECREATION DISTRICT

Battle Point Park Septic System Replacement – Kids Up Restroom #20235

Bid Document

Specifications, Proposal and Contract

Documents

May 2025

BAINBRIDGE ISLAND METRO PARK & RECREATION DISTRICT
Battle Point Park Septic System Replacement – Kids Up Restroom #20235

Bid Document

Specifications, Proposal and Contract Documents

May 2025

District Officials:

Executive Director: Dan Hamlin

Parks Board: Dawn Janow, Ken DeWitt, Tom Swolgaard, Jay Kinney, Tom Goodlin

Owner:

Bainbridge Island Metro Park & Recreation District,
11299 Arrow Point Dr NE
Bainbridge Island, WA 98110

Project Manager:

David Hary

Parks Superintendent

206-351-4659

Email: dharry@biparks.org

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CONTACT LIST

PART 1 - GENERAL

Project Team	Contact	Phone/e-mail
Owner Project Manager		
Parks Superintendent Bainbridge Island Metro Park & Recreation District 11299 Arrow Point Dr NE Bainbridge Island, WA, 98110	David Harry	(206) 351-4659
Owner Administration		
Procurement Administrator Bainbridge Island Metro Park & Recreation District 7686 NE High School Rd Bainbridge Island, WA, 98110	Michelle Miller	(206) 825-9337

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 00 01 00

INVITATION TO BID

Bainbridge Island Metropolitan Park & Recreation District

BID NOTICE

Project: Battle Point Park Septic System Replacement – Kids Up Restroom #20235

PART 1 - GENERAL

1.01 SUMMARY

The Bainbridge Island Metropolitan Park and Recreation District will receive bids for the Battle Point Park Septic System Replacement – Kids Up Restroom #20235 at the Strawberry Hill Administrative Office, 7686 NE High School Road, Bainbridge Island, WA 98110 until 2 pm PST, June 18th, 2025. Bids received after the appointed time set for receipt will not be accepted. All work completed for the Bainbridge Island Metropolitan Park District will be considered a public works project with prevailing wage documentation required. Prevailing wage rates for Kitsap County can be found here:

<https://secure.lni.wa.gov/wagelookup/rates/journey-level-rates>

Contact: David Harry, Project Manager, Dharry@biparks.org, 206-351-4659

Prospective bidders may access the public park sites for walkthroughs between dawn and dusk.

Only companies licensed to install septic systems in Kitsap County are eligible to bid on this project.

Bid documents may be viewed at www.biparks.org/doing-business

1.02 SCOPE OF WORK

- A. This scope of work outlines the requirements and activities necessary for the decommissioning and removal of the existing septic system and installation of a new system septic system per Charles H. Pollmar & Associates design plans and specifications according to code and Kitsap County Health Department requirements. The exact location of the tanks, associated piping, and power will deviate from the drawings and must be verified in the field with the District Project Manager and septic designer before a Notice to Proceed shall be issued.

1.03 NOTICE TO BIDDERS

- A. Bids will be received by the Bainbridge Island Metropolitan Park & Recreation District, Bainbridge Island, WA, and are to be delivered to the Front Desk located at the Strawberry Hill Administrative Office, 7686 NE High School Road, Bainbridge Island,

WA 98110, no later than 2:00 p.m. (Pacific Standard Time), on June 18th, 2025.

- B. Bids will be opened and publicly read aloud Wednesday, June 18th, 2025 at 2:00 PM PST in person. There will be no virtual link available for this event.
- C. All of the bidding documents are on file in the office of the Owner. Bona fide bidders may obtain bidding documents, available May 19th, 2025, online at www.biparks.org/doing-business. Questions may be directed to Michelle Miller, Procurement Administrator, michellem@biparks.org. Please note that you must be licensed to install septic systems in Kitsap County to bid on this project.
- D. Copies:
 - 1. Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Invitation to Bid for the fee designated. This will be considered a sale and will involve no refunding.
 - 2. Bidding Documents may be issued directly to Sub-Bidders.
 - 3. Bidders shall use complete sets of Bidding Documents in preparing Bids; neither the Owner nor the Architect assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
 - 4. The Owner or the Architect, in making copies of the Bidding Documents available on the above terms does so only for the purpose of obtaining Bids on the Work and does not confer a license or grant for any other use.
- E. Interpretations or correction of bidding documents
 - 1. Bidders or Sub-bidders shall promptly notify the Architect of any ambiguity, inconsistency, or error, which they may discover upon examination of the Bidding Documents or of the site and local conditions.
 - 2. Bidders and Sub-bidders requiring clarification or interpretation of the Bidding Documents shall make a written request which shall reach the Architect at least seven days prior to the date for receipt of Bids.
 - 3. Any interpretation, correction, or change of the Bidding Documents will be made by Addendum. (See 3.4) Interpretations, corrections or changes of the Bidding Documents made in any other manner will not be binding, and Bidders shall not rely upon such interpretations, corrections, and changes.
- F. Substitutions
 - 1. The materials, products, and equipment described in the Bidding Documents establish a standard of required function, dimension, appearance, and

quality to be met by any proposed substitution.

2. No substitution will be considered prior to receipt of Bids unless a written request for approval has been received by the Architect at least ten days prior to the date for receipt of Bids. Each such request shall include the name of the material or equipment for which it is to be substituted and a complete description of the proposed substitute including drawings, cuts, performance and test data and any other information necessary for an evaluation. A statement setting forth any changes in other materials, equipment or other Work incorporated by the substitute shall be included. The burden of proof of the merit of the proposed substitute is upon the proposer. The Architect /Owner's decision of approval or disapproval of a proposed substitution shall be final and binding.
3. If the Architect/Owner approves any proposed substitution prior to receipt of Bids, such approval will be set forth in an Addendum. Bidders shall not rely upon approvals made in any other manner. Should any proposed product substitution require any re-design work by the Architect/Owner or his consultants to accommodate the substitute product, costs for such redesign work shall be included in the Bid amount and shall be paid to the Architect at his usual rates/Owner at reasonable rates for the time expended in the required re-design work.
4. No substitutions will be considered after the Contract award unless specifically provided in the Contract Documents.
5. Substitution requests shall be made only on the Substitution Request Form found hereinafter. Fill in all data requested on the form and such form shall be received by the Architect at least ten days prior to the date for receiving bids.

G. Addenda

1. Addenda will be mailed or delivered to all who are known by the Architect/Owner to have received a complete set of Bidding Documents.
2. Copies of Addenda will be made available for inspection wherever Bidding Documents are on file for that purpose.
3. No Addenda will be issued later than four days prior to the date for receipt of Bids except an Addendum withdrawing the request for Bids or one, which includes postponements of the date for receipt of Bids
4. Each Bidder shall ascertain prior to submitting his bid that he has received all Addenda issued, and he shall acknowledge their receipt in his Bid.

H. Drawings, Project Manuals, and Coordination

1. Prior to submitting a bid proposal for work being bid upon, examine and coordinate all Bidding Documents with all other contracts to be awarded separately from but in connection with the work being bid upon, so that Bidder is fully informed as to conditions affecting work under contract being bid upon. Failure to do so shall not be the cause of any additional costs for work caused therefrom.

1.04 BIDDING PROCEDURE

A. Forms and Style of Bids

1. Bids shall be submitted on forms identical to the form included with the Bidding Documents.
2. All blanks on the bid form shall be filled in by computer, typewriter, or manually in ink.
3. Where so indicated by the makeup of the bid form, sums shall be expressed in both words and figures, and in case of discrepancy between the two, the amount written in words shall govern.
4. Any interlineation, alteration, or erasure must be initialed by the signer of the Bid.
5. All requested Alternates shall be bid. If no change in the Base Bid is required, enter "No Change".
6. Where two or more Bids for Designated portions of the Work have been requested, the Bidder may, without forfeiture of his bid security, state his refusal to accept award of less than the combination of Bids he so stipulates. The Bidder shall make no additional stipulations on the bid form nor qualify his Bid in any other manner.
7. The prices in the Bid shall include all applicable federal, state, and local taxes for the job site, Bainbridge Island, Kitsap County, Washington.
8. Each copy of the Bid shall include the legal name of the Bidder and a statement that the Bidder is a sole proprietor, a partnership, a corporation, or some other legal entity. Each proposal signature sheet shall be signed by the person or persons legally authorized to bind the Bidder to a contract. A bid by a corporation shall further give the state of incorporation and have the corporate seal, if there is one, affixed. A bid submitted by an agent shall have a current power of attorney attached certifying the agent's authority to bind the Bidder.

B. Bid Security

1. Each bid must be accompanied by a certified check for 5% of the total maximum amount of the bid, made payable to the Owner, or a bid bond in the form furnished by the Owner for 5% of the total maximum amount of the bid, as a guarantee that the bidder will promptly execute a valid contract with the Owner in accordance with the bidding documents. If a bid bond is used, the 5% may be shown in dollars and cents or the form may be filled in by inserting therein, in lieu of dollars of cents, "5% of the amount of the accompanying proposal." Bonds must be satisfactory to the Owner. Check or bid bond of the successful bidder will be returned immediately upon execution of contract in acceptance of performance and payment bond. All other checks will be returned upon execution of the contract. The Bidder acknowledges that the Owner will suffer substantial damages if Bidder refuses to enter the Contract or furnish the required bonds but that such damages are difficult to determine with precision. If the Bidder refuses to enter into such Contract or fails to furnish such bonds if required (all within the required time), then the Owner may elect to retain and forfeit the good security or Bid Bond as liquidated damages (and not a penalty) or collect actual damages from the Bidder.
2. The surety bond shall be written on the Bid Bond form supplied with the Bidding documents, and the attorney-in-fact who executes the bond on behalf of the surety shall affix to the bond a certified and current copy of his power of attorney.
3. The Owner will have the right to retain the bid security of Bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn, or (c) all Bids have been rejected.

C. Subcontractors

1. When the Owner's estimate of the project cost exceeds \$1,000,000 (including additive alternates), the bidder is required to list the names of the subcontractors with whom the bidder, if awarded the contract, will subcontract for performance of the work of: HVAC (heating, ventilation, and air conditioning); plumbing as described in chapter 18.106 RCW; and electrical as described in chapter 19.28 RCW, or to name itself for the work. The prime contract bidder shall not list more than one subcontractor for each category of work identified, unless subcontractors vary with bid alternates, in which case the prime contract bidder must indicate which subcontractor will be used for which alternate. Failure of the prime contract bidder to submit as part of the bid the names of such subcontractors or to name itself to perform such work or the naming of two or more subcontractors to perform the same work shall render the prime contract bidder's bid nonresponsive and, therefore, void. If the bidder does not intend to award any subcontracts for the base bid and alternates, the bidder shall so indicate on their subcontractor list. (Reference RCW 39.30.060)

2. Failure to meet this requirement shall render the bidder's bid non-responsive and, therefore, void.
3. The Bidder's list of subcontractors shall be submitted on the "Subcontractor Listing" form included with the bid documents.
4. The successful Bidder shall not be permitted to change Subcontractors named on the Subcontractor Listing without the prior written consent of the Owner and as stipulated in the General Conditions.

D. Submission of Bids

1. All copies of the Bid, the bid security, if any, and any other documents required to be submitted with the Bid shall be addressed to the Bainbridge Island Metropolitan Park and Recreation District and shall be identified with the Project name, the Bidder's name, and address and, if applicable, the designated portion of the Work for which the Bid submitted.
2. Bids shall be deposited at the designated location prior to the time and date for receipt of Bids indicated in the Invitation to Bid, or any extension thereof made by Addendum. Bids received after the time and date for receipt of Bids will be returned unopened. Bids received after the submittal deadline or at the wrong location will be rejected as non-responsive.
3. All Bids shall be logged by the Owner upon receipt. The Bidder shall assume responsibility that the Bid be logged and for timely delivery at the location designated for receipt of Bids. A Bidder mailing its Bid bears the risk of non-receipt and the risk of failure to log or inaccurate logging.
4. Oral, telephonic Bids are invalid and will not receive consideration.

E. Modification or Withdrawal of Bid

1. A Bid may not be modified, withdrawn, or canceled by the Bidder during the stipulated time period following the time and date designated for the receipt of Bids, and each Bidder so agrees in submitting his Bid.
2. Prior to the time and date designated for receipt of Bids, any Bid submitted may be modified or withdrawn by written notice to the Owner at the place designated for receipt of Bids. Such notice shall be in writing over the signature of the Bidder, written confirmation over the signature of the Bidder shall be mailed and postmarked on or before the date and time set for receipt of Bids, and it shall be so worded as not to reveal the amount of the original Bid.
3. Withdrawn Bids may be resubmitted up to the time designated for receipt of Bids if they conform with these Instructions to Bidders.

4. Bid security shall be in an amount sufficient for the Bid as modified or resubmitted.

1.05 PRE-BID INSPECTION OF PROJECT SITE

- A. Contractors are responsible for conducting their own site inspection prior to bidding to determine the logistics of performing the work under the contract.

1.06 CONSIDERATION OF BIDS

A. Opening of Bids

1. An abstract of the Base Bids and Alternate Bids, if any, will be made available to Bidders.

B. Rejection of Bids

1. The Owner shall have the right to reject any or all Bids or any items of the Bid and to reject a Bid not accompanied by any required Bid security or by other data required by the Bidding Documents, or to reject a Bid, which is in any way incomplete or irregular. Any or all bids may be rejected for good cause.
2. If Owner determines that an apparent low bidder is not responsible, Owner will provide its reasons for the determination in writing to the bidder. The bidder may appeal the determination by within three (3) days of its receipt of Owner's determination presenting additional information to Owner. If bidder provides this additional information, Owner will provide a final and binding written determination to the bidder.

C. Contract Award

1. It is the intent of the Owner to award a Contract to the lowest responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bidding Documents and does not exceed the funds available. The Owner shall have the right to waive any informality, irregularity, or technical defect in any Bid or Bids received and to accept the Bid or Bids, which, in its judgment, is in its best interests. In selecting the most responsible Bidder, consideration will be given to financial standing and the general competency of the Bidder for the performance of the work covered by the proposal.
2. The Owner shall have the right to accept Alternates in any order or combination, unless otherwise specifically provided in Article 9, and to determine the lowest and best Bidder on the basis of the sum of the Base Bid and the Alternates accepted, together with considerations of responsibility and compliance.

3. No bidder may withdraw his/her bid after the hour set for the opening of bids or before the award of the contract.
4. Proposals must be made on the Bidder's Proposal Form.
5. Bids will only be accepted by postal mail or in person. No email bids shall be accepted.

1.07 POST BID INFORMATION

A. Submittals

1. The bidder shall, within seven days of notification of selection for the award of a Contract for the Work, submit the following information to the Architect/Owner:
 - a. A designation of the Work to be performed by the Bidder with his own forces;
 - b. The names of the suppliers of items, systems, materials and equipment proposed for the Work;
 - c. A list of names of the Subcontractors or other persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for the principal portions of the Work.
2. The Bidder will be required to establish to the satisfaction of the Architect and the Owner the reliability and responsibility of the persons or entities proposed to furnish and perform the Work described in the Bidding Documents
3. Prior to the award of the Contract, the Architect/Owner will notify the Bidder in writing if either the Owner or the Architect, after due investigation, has reasonable objection to any such proposed person or entity. If the Owner or Architect has reasonable objection to any such proposed person or entity, the Bidder may, at his option, (1) withdraw his Bid, or (2) submit an acceptable substitute person or entity with an adjustment in his bid price to cover the difference in cost occasioned by such substitution. The Owner may, at his discretion, accept the adjusted bid price or he may disqualify the Bidder. In the event of either withdrawal or disqualification under this Subparagraph, bid security will not be forfeited, notwithstanding the provisions of Paragraph 1.05.E.1.
4. Persons and entities proposed by the Bidder and to whom the Owner has, and the Architect have made no reasonable objection under the provisions of Subparagraph 6.2.3 must be used on the Work for which they were proposed and shall not be changed except with the written consent of the Owner and

the Architect.

1.08 FAITHFUL PERFORMANCE AND LABOR AND MATERIAL BOND

A. Bond Requirements

1. Prior to execution of the Contract, the Bidder shall furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form and amount as the Owner may prescribe. Bonds may be secured through the Bidder's usual sources from a company licensed to do business in Washington State and excellently rated. The cost of such bonds shall be included in the Bid.

B. Time of Delivery and Form of Bonds

1. The bidder shall deliver the required bonds to the Owner not later than the date of execution of the Contract, or if the Work is to be commenced prior thereto in response to a letter of intent, the Bidder shall, prior to commencement of the Work, submit evidence satisfactory to the Owner that such bonds will be furnished.
2. The bonds shall be written on Faithful Performance Bond and Labor and Material Payment Bond forms provided by the Owner.
3. The Bidder shall require the attorney-in-fact who executes the required bonds on behalf of the surety to affix thereto a certified and current copy of his power of attorney.

1.09 AGREEMENT BETWEEN OWNER AND CONTRACTOR

A. Form to be used

1. Unless otherwise required in the Bidding Documents, the Agreement for the Work will be written on the attached "Contract for Construction Services".

B. Execution of Agreement

1. A Bidder whose proposal is accepted shall sign the written Agreement between Owner and Contractor within ten (10) days from the date of mailing of a Notice from Owner to Bidder of acceptance of his proposal. Failure to so execute the Agreement shall result in forfeiture of the Bidder's bond or certified check.

1.10 SUPPLEMENTARY INSTRUCTIONS

- A. Complete Section 00 11 53 Request for Qualifications for submittal with bid materials.

1.11 DEFINITIONS

- A. Bidding Documents include the Bid Notice, Invitation to Bid, Instructions to Bidders, General Conditions for Bainbridge Island Metropolitan Park and Recreation District Public Works Projects, Supplemental Conditions to the General Conditions for Bainbridge Island Metropolitan Park and Recreation District Public Works Projects, Special Provisions if applicable, Memorandum to All Potential Bidders, Bidder's Proposal and Proposal Signature Sheet, Subcontractor Listing Form if project is estimated at \$1,000,000 or more, Bidder's Bond, Sample Faithful Performance and Payment Bond, Sample Retainage Bond, Sample Contract for Construction Services, Washington State Prevailing Wage Rates and Benefit Code Key, Davis-Bacon Wage Determinations if project has Federal Funding, Technical Specifications and List of Drawings listed in the Table of Contents, Drawings if applicable, and any addenda issued prior to receipt of bids.
- B. The Contract Documents proposed for the work consist of the Contract for Construction Services, the conditions of the Contract (General, Supplementary and any other conditions), applicable Washington State Prevailing Wage Rates and Benefit Code Key, applicable Davis Bacon Wage Determinations if project has Federal Funding, the Drawings and Specifications, and all addenda issued prior to, and all modifications issued after execution of the Contract
- C. All definitions set forth in the General Conditions for Bainbridge Island Metropolitan Park and Recreation District Public Works Projects, and in other Contract Documents are applicable to the Bidding Documents.
- D. Addenda are written, or graphic instruments issued by the Architect prior to the execution of the Contract, which modify or interpret the Bidding Documents by additions, deletions, clarifications, or corrections
- E. Bid is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- F. The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids.
- G. An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.
- H. A Unit Price is an amount stated in the Bid as a price per unit of measurement for materials or services as described in the Bidding Documents or in the proposed Contract Documents.
- I. A Bidder is a person or entity who submits a Bid

- J. A Sub-bidder is a person or entity who submits a bid to a Bidder for materials or labor for a portion of the Work.

1.12 BIDDER'S REPRESENTATIONS

- A. Each Bidder by making his Bid represents that:
1. He has read and understands the Bidding Documents and his Bid is made in accordance therewith.
 2. He has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the proposed Contract Documents' requirements.
 3. His Bid is based upon the materials, systems, and equipment required by the Bidding Documents without exception.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 00 10 00

INSTRUCTIONS TO BIDDERS

PART 1 - GENERAL

Bainbridge Island Metropolitan Park & Recreation District

MEMORANDUM

TO: All Potential Bidders on the Small Works Roster
FROM: Bainbridge Island Metropolitan Park and Recreation District
SUBJECT: Battle Point Park Septic System Replacement – Kids Up Restroom Project #20235

Bids for this project are due no later than 2 PM PST on Wednesday, June 18th, 2025, mailed or dropped off at the Strawberry Hill Administrative Office, 7686 NE High School Road, Bainbridge Island, WA 98110.

At the time of the bidding, please submit the following forms, which are attached. Please do not submit your full specification booklet. Failure to properly complete or submit ALL forms will render your bid non-responsive.

- Bid Proposal Form
- Certifications of Wage Form
- Bidders Bond
- Statement of Proposed Subcontractors and Items of Work
- Proof of Certification for Kitsap County Septic System Installation

The following shall be submitted upon Notice of Intent to Award

- W-9
- Insurance
- Agreement
- Faithful Performance and Payment Bond
- Retainage Bond (if applicable)

If you have any questions, please contact the Procurement Administrator, Michelle Miller, michellem@biparks.org

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 00 30 00

BID PROPOSAL

PART 1 - GENERAL

**1.01 To Bainbridge Island Metropolitan Park and Recreation District
7686 NE High School Road
Bainbridge Island, WA 98110**

- A. The undersigned Bidder declares that he has read and fully understands the Notice inviting bids and each and every other Contract Document referred to therein and agrees to all of the terms, conditions and provisions contained therein; that he has examined the site of the work and has made the investigations and formed the estimates as to all conditions and contingencies referred to in and required by the Contract Documents, and he proposes and agrees that if his bid as submitted in the Proposal be accepted, he will contract in the form provided to perform all of the work and in the manner required by the Contract Documents and to complete the same within the time stipulated; that he will accept in full payment therefor the prices named herein. Said prices are to include and cover the furnishing of all materials, the performing of all labor requisite or proper, supervision, overhead, profit, taxes (excluding State sales tax), and the providing of all necessary machinery, tools, appurtenances, equipment and other means required to fully complete this contract, except as otherwise specifically provided in the Specifications.
- B. Bidder further agrees that he will sign the contract in accordance with the Proposal as accepted and furnish the required bonds within ten (10) days from date of mailing of said notice of acceptance to him at his address as given below or within such additional time as may be allowed by the Architect, but in any event within twenty (20) days after said mailing; upon his failure or refusal to do so within said time, the certified or cashier's check or bidder's bond, accompanying his bid, and the money payable thereon, shall be forfeited to and become the property of the owner as liquidated damages (and not a penalty) for such failure or refusal, provided, that if said bidder shall execute the contract and furnish the required bonds within the time aforesaid, his certified or cashier's check, if furnished, shall be returned to him within three (3) days thereafter, and the bid bond, if furnished, shall become void.
- C. Bidder agrees that his Proposal shall remain open and not withdrawn for a period of not less than sixty (60) days from the date of opening bids.
- D. No extra will be allowed if an increase becomes necessary due to an error or omission of contractor or any subcontractor.
- E. Written "Changes in Work" will be issued formalizing any authorized changes.

- F. Owner will evaluate bids to determine the lowest Total Price offered by responsive, responsible bidder. The Owner reserves the right to reject a bid in the event it is determined that any price for any bid item is unreasonable, unbalanced, or otherwise not in the best interest of Owner. A contract will be awarded, if at all, based on the lowest Total Price of responsive, responsible bidder.
- G. The owner reserves the right, but without obligation, to weigh the irregularities and informalities. The Owner further reserves the right to reject any portion of any bid, and/or to reject all bids. Construction shall be completed within 180 calendar days from the written notice to proceed. If not completed by such date, the Contractor shall be liable to the District for damages. The Contractor acknowledges and agrees to abide by all provisions of the General Conditions Article 3.07, Damages for Failure to Achieve Timely Completion. The Contractor further agrees to pay to the Owner as liquidated damages (and not a penalty) the sum of \$500.00 for each calendar day that he shall be in default after the time of completion specified herein.
- H. Receipt of addenda numbered is hereby acknowledged and all costs of the work therefore have been included in the Proposal.
- I. Base Bid Schedule – see next page
- J. Attached forms: Bidder's Bond or Certified/Cashier's Check

**Bids are due no later than 2 PM PST on Wednesday, June 18th, 2025
Mailed or dropped off at the Strawberry Hill Administration Office
7686 NE High School Road, Bainbridge Island, WA 98110**

BID PROPOSAL FORM

The undersigned hereby certifies that they have examined the locations and constructions details of work outlined in the Plans and Specifications for: **BATTLE POINT PARK SEPTIC SYSTEM REPLACEMENT – KIDS UP RESTROOM #20235** Bainbridge Island in Kitsap County, WA, and has read and thoroughly understands the plans, specifications, and contract governing the work included in this improvement, and the method by which payment will be made for said work, and hereby propose to undertake and compete the work included in this improvement in accordance with the said plans, specifications, and contract and at the following schedule of rates and prices.

NOTE: Unit prices and total prices for all items, all extensions, and total amount of bid must be shown. Show prices and legible figures (not words) written in ink or typed.

Base Bid Schedule

Option	BID ITEM DESCRIPTION	UNIT	QTY	SUM TOTAL
1	Mobilization and Demobilization	LS	1	
2	Old System Demo and New System Install	LS	1	
BASE BID SUBTOTAL				\$
WASHINGTON STATE SALES TAX (9.2%)				\$
GRAND TOTAL BID				\$

Evaluation of Bids: The evaluation of bids and determination of the lowest responsive and responsible bid will be based on Base Bid Subtotal in the Base Bid Schedule above plus any or alternatives that meet the operational priorities and available funding for this project.

Addenda: Bidder acknowledges review of all Addenda through No. _____

Bidding Company

Date

SECTION 00 43 43

CERTIFICATIONS OF WAGE FORM

The bidder hereby certifies that, within the three-year period immediately preceding the bid solicitation date May 19, 2025, the bidder is not a “willful” violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48, or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the Department of Labor and Industries or through a civil judgment entered by a court of limited or general jurisdiction.

I declare under penalty of perjury under the laws of the State of Washington that the foregoing is true and correct.

Bidder’s Business Name

Signature of Authorized Official*

Printed Name

Title

Date

City

State or country

Check One:

Sole Proprietorship ☐ Partnership ☐ Joint Venture ☐ Corporation ☐

State of Incorporation, or if not a corporation, State where business entity was formed:

If a co-partnership, give firm name under which business is transacted:

** If a corporation, proposal must be executed in the corporate name by the president or vice-president (or any other corporate officer accompanied by evidence of authority to sign).
If a co-partnership, proposal must be executed by a partner.*

END OF SECTION

SECTION 00 52 00

AGREEMENT

AGREEMENT FOR CONSTRUCTION SERVICES

This agreement is entered into the date below written between the BAINBRIDGE ISLAND METROPOLITAN PARK AND RECREATION DISTRICT, a Washington special purpose district (the "District"), and _____, referred to as "*Contractor*" for the project **BATTLE POINT PARK SEPTIC SYSTEM REPLACEMENT – KIDS UP RESTROOM #20235**.

- 1) Services Rendered by *Contractor*: *Contractor* shall provide the professional services as defined in this Agreement and as necessary to accomplish the Scope of the Services. *Contractor* shall furnish all services, labor and related equipment to conduct and complete the work, except as specifically noted otherwise in this agreement.
- 2) Terms of Payment:
 - A) Payment. The District shall pay *Contractor* for cost reimbursable services: (check one)
☐ Hourly, plus actual expenses, in accordance with Attachment A, but not more than a total of _____;
☐ Fixed Sum: a total amount of \$_____ (*see attachment A*)
☐ Other: _____.
 - B) Invoicing. *Contractor* shall submit monthly invoices for services performed in a previous calendar month in a format acceptable to the District. Each project and each task with a project shall be the subject of a separate invoice. *Contractor* shall maintain time and expense records according to industry standards and provide them to the District upon request.
 - C) Payments to *Contractor*. All invoices shall be paid by mailing a check within 60 days of receipt of a proper invoice and W-9 form. Checks will be mailed to address indicated on W-9 submitted by *Contractor*.
 - D) Final Payment. Final payment of any balances will be made upon completion of the Scope of Service (See Attachment A) and receipt of all deliverables and all project- related documents and data that are required under this Agreement.
 - E) Satisfaction of Scope of Services. If the services rendered do not meet the requirements of this Agreement, *Contractor* shall timely correct or modify the work to comply with this Agreement. The District may withhold payment for such work until it meets the requirements of the Agreement. Satisfaction of services will be the degree of skill and diligence normally employed by professional engineers and consultants performing the same or similar services.
- 3) Discrimination and Compliance with Laws:

A) *Contractor* agrees not to discriminate against any employee or any other person in the performance of the Agreement because of race, creed, color, national origin, marital status, sex, age, veteran's status, disability or other circumstances prohibited under federal state or local laws, except for a bona fide occupational qualification.

B) *Contractor* shall comply with all federal, state and local laws and ordinances applicable to the work to be done under the Agreement. Violation of Paragraph 3 shall be a material breach of this Agreement and grounds for cancellation, termination or suspension of the District.

4) Term and Termination of Agreement:

A) This Agreement shall become effective upon execution by both parties and shall continue in full force until _____ unless sooner terminated by either party pursuant to Section 4(B) below.

B) This Agreement may be terminated by either party without cause upon 30-days written notice, in which event all finished or unfinished documents, reports, data or other material or work of pursuant to this Agreement shall be submitted to the District, and *Contractor* shall be entitled to just equitable compensation at the rate set forth in Paragraph 2 for any satisfactory work completed prior to the date of termination.

5) Intellectual Property:

A) Any and all intellectual property developed in the course of the Scope of Services is a direct result of the Agreement whose rights are controlled by the District.

B) Ownership of intellectual property developed solely as a result of the Agreement is owned by the District, this pertains to any digitized material, technical data, software, reports and permits.

6) General Administration:

A) District Authorization and its Designee. The Director of the District, or his designee, shall be the District's representative and shall oversee and approve all services to be performed, coordinate all communications and review and approve all invoices under this Agreement.

B) Independent Contractor. Contractor's relationship with District is that of an independent contractor. Contractor is free to engage in other independent contracting activities, provided that such activities do not conflict with or interfere with Contractor's duties hereunder. Contractor has the sole right to control and direct the means, manner and method by which the services required by this Agreement will be performed. Contractor is in business for itself and is not economically dependent on District. Nothing in this Agreement, or in the business dealings or relationship between the parties, shall be construed to create the relationship of employee and employer, partners or joint ventures. Contractor warrants to District that it will pay all applicable taxes and withholdings, and will make all filings with governmental entities, as required as a result of execution of this Agreement and compensation received by it hereunder. Contractor agrees to defend, indemnify and hold District harmless from

and against any and all claims, actions, penalties, fees, assessments, liabilities and expenses (including reasonable attorney fees) arising out of or relating in way whatsoever to ____Contractor's breach of the warranty in this Section 6.B

- C) Lower Tier Subcontracts. *Contractor* shall not sublet or assign any of the work covered by the Agreement, except with the prior written approval of the District and in strict compliance with the terms, provisions, and conditions of the Agreement. *Contractor* will bind all Lower Tier Subconsultants to the Provisions of this Agreement.
 - D) No Additional Relationship or Burden Implied. Neither this Agreement nor any Lower Tier subcontract will create any contractual relationship between any Lower Tier Subconsultant and the District nor any liability onto the District from any Lower Tier Subconsultant.
 - E) Access to and Retention of Records. Contractor will maintain project and accounting records for required six (6) year WA State retention period in accordance with RCW 40.14.070, and make them available for examination by the District upon request. Records will also be made available to the District to fulfill any public record request received by the District. (See Section 9: Public Records Act). If Contractor does not want to retain the project and accounting records for the six (6) year length of time stipulated in the WA State Retention Schedule, Contractor will turn the records over to the District who will assume responsibility for retaining them for the required length of time.
 - F) Notice of Delay. The time schedule for the performance of services set forth under this Agreement is based on *Contractor's* anticipation of the orderly and continuous progress of the project. If *Contractor* is delayed in the performance of services by conditions that are beyond its control, *Contractor* shall notify the District in writing of the cause of the delay and the amount of the delay anticipated. Such notice shall be delivered to the District within five (5) days of the time *Contractor* is aware of the delay.
 - G) Permits, Licenses and Fees: *Owner* will obtain and pay for all permits and licenses required by law that are associated with *Contractor's* performance of the Scope of Services and will give all necessary notices.
 - H) The GENERAL CONDITIONS FOR BAINBRIDGE ISLAND METROPOLITAN PARK AND RECREATION DISTRICT PUBLIC WORKS PROJECTS ("General Conditions") are incorporated herein by this reference as if fully set forth herein. If there is a conflict between this Agreement and the General Conditions, the General Conditions control.
- 7) Insurance: *Contractor* will maintain throughout this Agreement the following insurance and will submit certificates verifying such to the District:
- A) Worker's compensation insurance as required by Washington State.
 - B) Comprehensive automobile and vehicle liability insurance covering claims for injuries to members of the public and damages to property of others arising from the use of motor

vehicles, including onsite and offsite operations, and owned, or non-owned or hired vehicles, with \$2,000,000 combined single limits.

- C) Comprehensive general liability insurance covering claims for injuries arising out of claims for injuries arising out of any negligent act or omission of Contractor or of any of its employees, agents, or subcontractors with \$2,000,000 per occurrence/\$4,000,000 aggregate.
- D) All insurance certificates will state that the insurance carrier will give the District thirty (30) days' notice of any cancelation of the policies. Excepting the Worker's Compensation Insurance secured by the *Contractor*, the District will be named on all policies as an additional insured. The *Contractor* shall furnish the District with verification of insurance and endorsements required by the agreement. The District reserves the right to require complete, certified copies of all required insurance policies at any time.

8) Hold Harmless:

The Contractor shall protect, defend, indemnify and save harmless District, its officers, employees and agents from any and all costs, claims, judgments, awards of damages, and expenses (including reasonable attorney fees) arising out of or in any way resulting from (i) the negligent acts or omissions, or intentional misconduct, of Contractor, its officers, employees and agents in performing this Agreement and/or (ii) material breach of this Agreement by Contractor.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Contractor and the District, its officers, officials, employees, and volunteers, the Contractor's liability hereunder shall be only to the extent of the Contractor's negligence. It is further specifically and expressly understood that the indemnification provided herein constitutes the Contractor's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the parties.

The District shall protect, defend, indemnify and save harmless Contractor, its officers, employees and agents from any and all costs, claims, judgments and awards of damages, and expenses (including reasonable attorney fees) arising out of or in any way resulting from (i) the grossly negligent acts or omissions, or intentional misconduct, of the District, its officers, employees or agents in performing this Agreement and/or (ii) material breach of this Agreement by the District. The provisions of this Section 8 shall survive the expiration or termination of this Agreement.

9) Public Records Act

- A) This Agreement and all public records associated with this Agreement shall be available for inspection and copying by the public where required by the Public Records Act, Chapter 42.56 RCW (the "Act"). To the extent that public records then in the custody of the Contractor are needed for the Park District to respond to a request under the Act, as determined by the Park District, the Contractor agrees to make them promptly available to the Park District.

- B) If the Contractor considers any portion of any record provided to the Park District under this Agreement, whether in electronic or hard copy form, to be protected from disclosure under law, the Contractor shall clearly identify any specific information that it claims to be confidential or proprietary. If the Park District receives a request under the Act to inspect or copy the information so identified by the Contractor and the Park District determines that release of the information is required by the Act or otherwise appropriate, the Park District's sole obligations shall be to notify the Contractor (a) of the request and (b) of the date that such information will be released to the requester unless the Contractor obtains a court order to enjoin that disclosure pursuant to RCW 42.56.540. If the Contractor fails to timely obtain a court order enjoining disclosure, the Park District will release the requested information on the date specified.
- C) The Park District has, and by this section assumes, no obligation on behalf of the Contractor to claim any exemption from disclosure under the Act. The Park District shall not be liable to the Contractor for releasing records not clearly identified by the Contractor as confidential or proprietary. The Park District shall not be liable to the Contractor for any records that the Park District releases in compliance with this section or in compliance with an order of a court of competent jurisdiction.

10) General Provisions:

- A) **Waivers.** No waiver by either party of any default by the other party in the performance of any provision of this Agreement will operate as, or be construed as, a waiver of any future default, whether like or different in character.
- B) **Force Majeure.** Neither party to this Agreement will be liable to the other party for delays in performing the Scope of Services, or for the direct or indirect costs resulting from such delays, that may result from labor strikes, riots, war, acts of governmental catastrophe, or any other cause beyond the reasonable control or contemplation of either party.
- C) **Authorization to Proceed.** Execution of the Agreement by the District will be authorization for *Contractor* to proceed with the Scope of Services, unless otherwise provided for in this Agreement.
- D) **No Third- Party Beneficiaries.** This Agreement gives no rights or benefits to anyone other than *Contractor* and the District and has no third-party beneficiaries.
- E) **Dispute Resolution.** In the event of a dispute between the parties arising under or relating in any way whatsoever to this Agreement, the parties shall attempt to resolve it through good faith negotiation. If the dispute is not resolved through such negotiation, the parties shall attempt to resolve it through mediation in Kitsap County, Washington, with a neutral, third-party mediator mutually agreed upon by the parties, with the costs of mediation shared equally by the parties. If the dispute is not resolved through mediation, then upon written demand by one of the parties it shall be referred to an arbitrator mutually agreed upon by the parties. The arbitration process shall be conducted in accordance with RCW 7.04A, except as modified herein. The arbitration

hearing shall be held in Kitsap County, Washington. All remedies, legal and equitable, available in court shall also be available in arbitration. The arbitrator's decision shall be final and binding, and judgment may be entered thereon in any court of competent jurisdiction. In any dispute arising out of this Agreement, including arbitration, the substantially prevailing party shall be entitled to recover its reasonable attorney fees and costs from the other party. This Agreement shall be governed by and construed in accordance with the laws of the State of Washington, without regard to conflict of law principles thereof. Venue of any dispute shall lie exclusively in Kitsap County.

- F) Contractor may not assign its rights or obligations arising under this Agreement without the prior written consent of District.
- G) If any provision of this Agreement shall be determined by a court of competent jurisdiction to be unenforceable, the remaining provisions of this Agreement are severable, and the unenforceability of any single provision herein shall not affect the remaining provisions of this Agreement.
- H) Those provisions of this Agreement that have or could have effect after termination of this Agreement, which include, without limitation, dispute resolution and indemnification provisions, shall survive termination of this Agreement and be fully applicable and enforceable thereafter.
- I) This Agreement represents the entire agreement between the parties, supersedes all prior agreements and understandings, and may be changed only by written amendment executed by both parties. This Agreement may be executed in counterparts, and facsimile and pdf signatures shall be deemed the equivalent of original signatures for all purposes.

11) Attachments and Schedules:

The following attachments and schedules are hereby made a part of this Agreement:

Attachment A – Complete Bid Package & Bid Submitted

Accepted for the Bainbridge Island Metropolitan Park and Recreation District

BY: _____ Date: _____

Name: _____ Title: _____

Accepted for *CONTRACTOR*

BY: _____ Date: _____

Name: _____ Title: _____

END OF SECTION

SECTION 00 61 00

BIDDER'S BOND

(Not necessary when certified or cashier's check of not less than 5% of total bid amount accompanies bid)

We, the undersigned principal and surety, and our heirs, executors, administrators, successors and assigns, are jointly and severally held and firmly bound to the Bainbridge Island Metropolitan Park and Recreation District of Bainbridge Island, Washington, a municipal corporation ["DISTRICT"], in the principal sum

of _____

(\$ _____), to be paid and forfeited to the District if the bid of the undersigned principal for _____ under the project entitled _____ shall be accepted and the proposed Contract awarded to said principal, and said principal shall fail or refuse to execute the Agreement in accordance with said bid as accepted and to furnish the bonds required in connection therewith within the time and form required. Otherwise, this obligation to be void.

WITNESS our hands this _____ day of _____ 2025.

Principal

By:

Title

Surety

SEAL

By:

Attorney-in-Fact

A notarial certificate of attorney-in-fact and seal of surety must be attached. If executed by an attorney-in-fact, proof of current authority must be attached.

END OF SECTION

SECTION 00 61 13

FAITHFUL PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENT

That we, _____, as Principal, and _____, as Surety, are held and firmly bound to the Bainbridge Island Metropolitan Park and Recreation District of Bainbridge Island, Washington, a municipal corporation ["DISTRICT"] in the sum of _____ Dollars (\$ _____), lawful money of the United States of America, for the payment of which sum, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, by these present.

The condition of the above obligation is such that, whereas said Principal has been awarded and is about to enter into the annexed contract, with the DISTRICT

_____ and to which reference is hereby made for all particulars, and is required by DISTRICT to give this bond in connection with the execution of said contract;

NOW THEREFORE, if said Principal as Contractor under said contract fails to perform all of the covenants, terms, conditions and stipulations of said contract on his or its part to be done and performed at the times and in the manner specified therein, or if said Principal shall fail to pay all of his subcontractors, suppliers, material men, and laborers on said work, or if all materials used and workmanship employed in the performance of the contract shall not be free from defects, or if any defects should appear therein with a period of one year from the date of acceptance by DISTRICT of the work under the contract and the said Principal and Contractor shall fail to repair, replace and correct such defects at his or its own expense and to the satisfaction of the Owner within thirty (30) days after notice thereof by DISTRICT, said Principal and Surety will pay the DISTRICT the amount of all its loss, cost, expense, damages and liability on account of any and all of the foregoing, not exceeding, however, the sum set forth above, and in case suit is brought upon this bond said Surety shall also pay a reasonable attorney's fee to be fixed by the court.

The Said Principal and Surety agree that any change, extension of time, alterations or additions to said contract or work or materials required thereunder shall not in any manner release either the Principal or the Surety from the obligations of this bond; and said Surety hereby waives notice of any such change, extension of time, alteration or additions to said contract or performance required thereunder.

IN WITNESS WHEREOF, the Principal and the Surety have executed this instrument in duplicate this _____ day of _____ 2025.

Surety

Principal

By:

By:

Its

Its

END OF SECTION

SECTION 00 61 23

RETAINAGE BOND

KNOW ALL MEN BY THESE PRESENT

That we, _____, as Principal, and _____, as Surety, are jointly and severally held and firmly bound to the Bainbridge Island Metropolitan Park and Recreation District, Washington, a municipal corporation ["DISTRICT"] and are similarly held and bound unto the beneficiaries of the trust fund created by RCW 60.28 as their heirs, executors, administrators, successors and assigns, in the penal sum of _____ Dollars (\$ _____), lawful money of the United States of America, plus 5% of any increase in the contract amount that have occurred or may occur due to change orders, increases in the quantities or the addition of any new item of work.

WHEREAS, on the _____ day of _____, 2025, the said Principal executed Contract No. _____, with the DISTRICT for _____.

WHEREAS, said contract and RCW 60.28 requires the DISTRICT to withhold from the Principal the sum of 5% of monies earned by the Contractor on estimates during the progress of construction, hereinafter referred to as earned retained funds.

AND NOW WHEREAS, Principal has requested that the DISTRICT not retain any future earned retained funds and that they release all of a portion of the current amount of earned retained funds as allowed under RCW 60.28.

NOW THEREFORE, the condition of this obligation is such that if the Principal shall use the earned retained funds which will not be retained or shall use such funds which are now being released, for the trust fund purposes of RCW 60.28, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

IN WITNESS WHEREOF, the Principal and the Surety have caused these presents to be duly signed and sealed this _____ day of _____, 2025.

_____ Surety	_____ Principal
By: _____	By: _____
_____ Its	_____ Its

END OF SECTION

SECTION 00 62 00

STATEMENT OF PROPOSED SUBCONTRACTORS AND ITEMS OF WORK

Print Contractors Name

Each Bidder shall submit with the Bid, or within one (1) hour after the time for submittal of sealed Bids, the names of all Subcontractors whose subcontract will amount to 10% or more of the total Bid. The list shall contain the name of the Subcontractor, the category of work to be performed by the Subcontractor, and the percentage of the total Bid price which is comprised of the Subcontractor's work.

Work to be Performed	% of Bid	Name and Phone Number of Subcontractor

END OF SECTION

SECTION 01 01 00

GENERAL PROVISIONS

PART 1 - GENERAL

1.01 DEFINITIONS

- A. "Application for Payment" means a written request submitted by Contractor to A/E for payment of Work completed in accordance with the Contract Documents and approved Schedule of Values, supported by such substantiating data as Owner or A/E may require.
- B. "Architect," "Engineer," or "A/E" means a person or entity lawfully entitled to practice architecture or engineering, representing Owner within the limits of its delegated authority.
- C. "Change Order" means a written instrument signed by Owner and Contractor stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of the adjustment in the Contract Sum, if any, and (3) the extent of the adjustment in the Contract Time, if any.
- D. "Claim" means Contractor's exclusive remedy for resolving disputes with Owner regarding the terms of a Change Order or a request for equitable adjustment, as more fully set forth in part 8.
- E. "Contract Award Amount" is the sum of the Base Bid and any accepted Alternates.
- F. "Contract Documents" means the Advertisement for Bids, Instructions for Bidders, completed Form of Proposal, General Conditions, Modifications to the General Conditions, Supplemental Conditions, Public Works Contract, other Special Forms, Drawings and Specifications, and all addenda and modifications thereof.
- G. "Contract Sum" is the total amount payable by Owner to Contractor for performance of the Work in accordance with the Contract Documents, including all taxes imposed by law and properly chargeable to the Work
- H. "Contract Time" is the number of calendar days allotted in the Contract Documents for achieving Substantial Completion of the Work.
- I. "Contractor" means the person or entity who has agreed with Owner to perform the Work in accordance with the Contract Documents.
- J. "Day(s)" unless otherwise specified shall mean calendar day(s).
- K. "Drawings" are the graphic and pictorial portions of the Contract Documents showing the design, location, and dimensions of the Work, and may include plans,

elevations, sections, details, schedules, and diagrams.

- L. "Final Acceptance" means the written acceptance issued to Contractor by Owner after Contractor has completed the requirements of the Contract Documents, as more fully set forth in Section 6.09 B.
- M. "Final Completion" means that the Work is fully and finally completed in accordance with the Contract Documents, as more fully set forth in Section 6.09 A.
- N. "Force Majeure" means those acts entitling Contractor to request an equitable adjustment in the Contract Time, as more fully set forth in paragraph 3.05A.
- O. "Notice" means a written notice which has been delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended or, if delivered or sent by registered or certified mail, to the last business address known to the party giving notice.
- P. "Notice to Proceed" means a notice from Owner to Contractor that defines the date on which the Contract Time begins to run.
- Q. "Owner" means the Bainbridge Island Metro Park & Recreation District or its authorized representative with the authority to enter into, administer, and/or terminate the Work in accordance with the Contract Documents and make related determinations and findings.
- R. "Person" means a corporation, partnership, business association of any kind, trust, company, or individual.
- S. "Prior Occupancy" means Owner's use of all or parts of the Project before Substantial Completion, as more fully set forth in Section 6.08 A.
- T. "Progress Schedule" means a schedule of the Work, in a form satisfactory to Owner, as further set forth in section 3.02.
- U. "Project" means the total construction of which the Work performed in accordance with the Contract Documents may be the whole or a part and which may include construction by Owner or by separate contractors.
- V. "Project Record" means the separate set of Drawings and Specifications as further set forth in paragraph 4.02A.
- W. "Schedule of Values" means a written breakdown allocating the total Contract Sum to each principle category of Work, in such detail as requested by Owner.
- X. "Specifications" are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.
- Y. "Subcontract" means a contract entered into by Subcontractor for the purpose of

obtaining supplies, materials, equipment, or services of any kind for or in connection with the Work.

- Z. "Subcontractor" means any person, other than Contractor, who agrees to furnish or furnishes any supplies, materials, equipment, or services of any kind in connection with the Work.
- AA. "Substantial Completion" means that stage in the progress of the Work when the construction is sufficiently complete, as more fully set forth in section 6.07.
- BB. "Work" means the construction and services required by the Contract Documents, and includes, but is not limited to, labor, materials, supplies, equipment, services, permits, and the manufacture and fabrication of components, performed, furnished, or provided in accordance with the Contract Documents.

1.02 ORDER OF PRECEDENCE

- A. Any conflict or inconsistency in the Contract Documents shall be resolved by giving the documents precedence in the following order.
 - 1. Signed Public Works Contract, including any Change Orders.
 - 2. Supplemental Conditions.
 - 3. Modifications to the General Conditions.
 - 4. General Conditions.
 - 5. Specifications--provisions in Division 1 shall take precedence over provisions of any other Division.
 - 6. Drawings--in case of conflict within the Drawings, large scale drawings shall take precedence over small scale drawings.
 - 7. Signed and Completed Bid Form.
 - 8. Instructions to Bidders.
 - 9. Advertisement for Bids.

1.03 EXECUTION AND INTENT

- A. Contractor makes the following representations to Owner:
 - 1. The Contract Sum is reasonable compensation for the Work and the Contract Time is adequate for the performance of the Work, as represented by the Contract Documents;
 - 2. Contractor has carefully reviewed the Contract Documents, visited and

examined the Project site, become familiar with the local conditions in which the Work is to be performed, and satisfied itself as to the nature, location, character, quality and quantity of the Work, the labor, materials, equipment, goods, supplies, work, services and other items to be furnished and all other requirements of the Contract Documents, as well as the surface and subsurface conditions and other matters that may be encountered at the Project site or affect performance of the Work or the cost or difficulty thereof;

3. Contractor is financially solvent, able to pay its debts as they mature, and possesses sufficient working capital to complete the Work and perform Contractor's obligations required by the Contract Documents; and
4. Contractor is able to furnish the plant, tools, materials, supplies, equipment and labor required to complete the Work and perform the obligations required by the Contract Documents and has sufficient experience and competence to do so.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 02 00

INSURANCE AND BONDS

PART 1 - GENERAL

1.01 CONTRACTORS LIABILITY INSURANCE

- A. The Contractor shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Contractor, their agents, representatives, employees or subcontractors.
- B. No Limitation. Contractor's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Contractor to the coverage provided by such insurance, or otherwise limit the District's recourse to any remedy available at law or in equity.
 - 1. Minimum Scope of Insurance. Contractor shall obtain insurance of the types described below:
 - a. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
 - b. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 or the equivalent and shall cover liability arising from premises, operations, independent contractors, products-completed operations, stop gap liability, personal injury and advertising injury, and liability assumed under an insured contract. The District shall be named as an additional insured under the Contractor's Commercial General Liability insurance policy with respect to the work performed for the District.
 - c. Workers' Compensation coverage as required by the Industrial Insurance laws of the state of Washington.
 - 2. Minimum Amounts of Insurance. Contractor shall maintain the following insurance limits:
 - a. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$2,000,000 per accident.

- b. Commercial General Liability insurance shall be written with limits no less than \$2,000,000 each occurrence, \$4,000,000 general aggregate and a \$4,000,000 products-completed operations aggregate limit.
- 3. Other Insurance Provisions. The insurance policies are to contain, or be endorsed to contain, the following provisions for Automobile Liability and Commercial General Liability insurance:
 - a. The Contractor's insurance coverage shall be primary insurance as respect the District. Any Insurance, self-insurance, or insurance pool coverage maintained by the District shall be excess of the Contractor's insurance and shall not contribute with it.
 - b. The Contractor's insurance shall be endorsed to state that coverage shall not be cancelled by either party, except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the District.
- 4. Acceptability of Insurers.
 - a. Insurance is to be placed with insurers with a current A.M. Best rating of not less than A:VII.
- 5. Verification of Coverage
 - a. Contractor shall furnish the District with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Contractor before commencement of the work
- 6. Subcontractors
 - a. Contractor shall ensure that each subcontractor of every tier obtain at a minimum the same insurance coverage and limits as stated herein for the Contractor. Upon request from the District, the Contractor shall provide evidence of such insurance.

1.02 PAYMENT AND PERFORMANCE BONDS

- A. Payment and performance bonds for 100% of the Contract Award Amount, plus state sales tax, shall be furnished for the Work, using the Payment Bond and Performance Bond form published and available from the American Institute of Architects (AIA) – form A312. Prior to execution of a Change Order that, cumulatively with previous Change Orders, increases the Contract Award Amount by 15% or more, the Contractor shall provide either new payment and performance bonds for the revised Contract Sum, or riders to the existing payment and performance bonds increasing

the amount of the bonds. The Contractor shall likewise provide additional bonds or riders when subsequent Change Orders increase the Contract Sum by 15% or more. No payment or performance bond is required if the Contract Sum is \$150,000 or less and Contractor agrees that Owner may, in lieu of the bond, retain a percentage of the Contract Sum for the period as allowed by RCW 39.08.010.

1.03 ALTERNATIVE SECURITY

- A. Contractor shall promptly furnish payment and performance bonds from an alternative surety as required to protect Owner and persons supplying labor or materials required by the Contract Documents if:
 - 1. Owner has a reasonable objection to the surety; or
 - 2. Any surety fails to furnish reports on its financial condition if requested by Owner.

1.04 BUILDER'S RISK

- A. Contractor shall purchase and maintain property insurance in the amount of the Contract Sum including all Change Orders for the Work on a replacement cost basis until Substantial Completion. The insurance shall cover the interest of Owner, Contractor, and any Subcontractors, as their interests may appear.
- B. Contractor property insurance shall be placed on an "all risk" basis and insure against the perils of fire and extended coverage and physical loss or damage including theft, vandalism, malicious mischief, collapse, false work, temporary buildings, debris removal including demolition occasioned by enforcement of any applicable legal requirements, and shall cover reasonable compensation for A/E's services and expenses required as a result of an insured loss.
- C. Owner and Contractor waive all subrogation rights against each other, any Subcontractors, A/E, A/E's subconsultants, separate contractors described in section 5.20, if any, and any of their subcontractors, for damages caused by fire or other perils to the extent covered by property insurance obtained pursuant to this section or other property insurance applicable to the Work, except such rights as they have to proceeds of such insurance held by Owner as fiduciary. The policies shall provide such waivers of subrogation by endorsement or otherwise. A waiver of subrogation shall be effective to a person or entity even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, did not pay the insurance premium directly or indirectly, and whether or not the person or entity had an insurable interest in the property damaged.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 03 00

TIME AND SCHEDULE

PART 1 - GENERAL

1.01 PROGRESSION AND COMPLETION

- A. Contractor shall diligently prosecute the Work, with adequate forces, achieve Substantial Completion within the Contract Time, and achieve Final Completion within a reasonable period thereafter.

1.02 CONSTRUCTION SCHEDULE

- A. Unless otherwise provided in Division 1, Contractor shall, within 14 days after issuance of the Notice to Proceed, submit a preliminary Progress Schedule. The Progress Schedule shall show the sequence in which Contractor proposes to perform the Work, and the dates on which Contractor plans to start and finish major portions of the Work, including dates for shop drawings and other submittals, and for acquiring materials and equipment.
- B. Unless otherwise provided in Division 1, the Progress Schedule shall be in the form of a bar chart, or a critical path method analysis, as specified by Owner. The preliminary Progress Schedule may be general, showing the major portions of the Work, with a more detailed Progress Schedule submitted as directed by Owner.
- C. Owner shall return comments on the preliminary Progress Schedule to Contractor within 14 days of receipt. Review by Owner of Contractor's schedule does not constitute an approval or acceptance of Contractor's construction means, methods, or sequencing, or its ability to complete the Work within the Contract Time. Contractor shall revise and resubmit its schedule, as necessary. Owner may withhold a portion of progress payments until a Progress Schedule has been submitted which meets the requirements of this section.
- D. Contractor shall utilize and comply with the Progress Schedule. On a monthly basis, or as otherwise directed by Owner, Contractor shall submit an updated Progress Schedule at its own expense to Owner indicating actual progress. If, in the opinion of Owner, Contractor is not in conformance with the Progress Schedule for reasons other than acts of Force Majeure as identified in section 3.05, Contractor shall take such steps as are necessary to bring the actual completion dates of its work activities into conformance with the Progress Schedule, or revise the Progress Schedule to reconcile with the actual progress of the Work.
- E. Contractor shall promptly notify Owner in writing of any actual or anticipated event which is delaying or could delay achievement of any milestone or performance of any critical path activity of the Work. Contractor shall indicate the expected duration of the delay, the anticipated effect of the delay on the Progress Schedule, and the action

being or to be taken to correct the problem. Provision of such notice does not relieve Contractor of its obligation to complete the Work within the Contract Time.

1.03 OWNER'S RIGHT TO SUSPEND THE WORK FOR CONVENIENCE

- A. Owner may, at its sole discretion, order Contractor, in writing, to suspend all or any part of the Work for up to 90 days, or for such longer period as mutually agreed.
- B. Upon receipt of a written notice suspending the Work, Contractor shall immediately comply with its terms and take all reasonable steps to minimize the incurrence of cost of performance directly attributable to such suspension. Within a period up to 90 days after the notice is delivered to Contractor, or within any extension of that period to which the parties shall have agreed, Owner shall either:
 - 1. Cancel the written notice suspending the Work; or
 - 2. Terminate the Work covered by the notice as provided in the termination provisions of part 9.
- C. If a written notice suspending the Work is cancelled or the period of the notice or any extension thereof expires, Contractor shall resume Work.
- D. Contractor shall be entitled to an equitable adjustment in the Contract Time, or Contract Sum, or both, for increases in the time or cost of performance directly attributable to such suspension, provided Contractor complies with all requirements set forth in part 7.

1.04 OWNER'S RIGHT TO STOP THE WORK FOR CAUSE

- A. If Contractor fails or refuses to perform its obligations in accordance with the Contract Documents, Owner may order Contractor, in writing, to stop the Work, or any portion thereof, until satisfactory corrective action has been taken.
- B. Contractor shall not be entitled to an equitable adjustment in the Contract Time or Contract Sum for any increased cost or time of performance attributable to Contractor's failure or refusal to perform or from any reasonable remedial action taken by Owner based upon such failure.

1.05 3.05 DELAY

- A. A. Any delay in or failure of performance by Owner or Contractor, other than the payment of money, shall not constitute a default hereunder if and to the extent the cause for such delay or failure of performance was unforeseeable and beyond the control of the party ("Force Majeure"). Acts of Force Majeure include, but are not limited to:
 - 1. Acts of God or the public enemy;
 - 2. Acts or omissions of any government entity;

3. Fire or any other casualty for which Contractor is not responsible;
 4. Quarantine or epidemic;
 5. Strike or defensive lockout; 6
 6. Unusually severe weather conditions which could not have been reasonably anticipated; and
 7. Unusual delay in receipt of supplies or products which were ordered and expedited and for which no substitute reasonably acceptable to Owner was available.
- B. Contractor shall be entitled to an equitable adjustment in the Contract Time for changes in the time of performance directly attributable to an act of Force Majeure, provided it makes a request for equitable adjustment according to section 7.03. Contractor shall not be entitled to an adjustment in the Contract Sum resulting from an act of Force Majeure.
- C. Contractor shall be entitled to an equitable adjustment in Contract Time, and may be entitled to an equitable adjustment in Contract Sum, if the cost or time of Contractor's performance is changed due to the fault or negligence of Owner, provided the Contractor makes a request according to sections 7.02 and 7.03.
- D. Contractor shall not be entitled to an adjustment in Contract Time or in the Contract Sum for any delay or failure of performance to the extent such delay or failure was caused by Contractor or anyone for whose acts Contractor is responsible.
- E. To the extent any delay or failure of performance was concurrently caused by the Owner and Contractor, Contractor shall be entitled to an adjustment in the Contract Time for that portion of the delay or failure of performance that was concurrently caused, provided it makes a request for equitable adjustment according to section 7.03, but shall not be entitled to an adjustment in Contract Sum.
- F. Contractor shall make all reasonable efforts to prevent and mitigate the effects of any delay, whether occasioned by an act of Force Majeure or otherwise.

1.06 NOTICE TO OWNER OF LABOR DISPUTES

- A. If Contractor has knowledge that any actual or potential labor dispute is delaying or threatens to delay timely performance in accordance with the Contract Documents, Contractor shall immediately give notice, including all relevant information, to Owner.
- B. Contractor agrees to insert a provision in its Subcontracts and to require insertion in all sub-subcontracts, that in the event timely performance of any such contract is delayed or threatened by delay by any actual or potential labor dispute, the Subcontractor or Sub-subcontractor shall immediately notify the next higher tier

Subcontractor or Contractor, as the case may be, of all relevant information concerning the dispute.

1.07 DAMAGES FOR FAILURE TO ACHIEVE TIMELY COMPLETION

A. Liquidated Damages

1. Timely performance and completion of the Work is essential to Owner and time limits stated in the Contract Documents are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work does not occur within the Contract Time. However, it would be difficult if not impossible to determine the exact amount of such damages. Therefore, liquidated damages will be set at \$500 per day. Consequently, provisions for liquidated damages are included in the Contract Documents.
2. The liquidated damage amounts set forth in the Contract Documents will be assessed not as a penalty, but as liquidated damages for breach of the Contract Documents. This amount is fixed and agreed upon by and between the Contractor and Owner because of the impracticability and extreme difficulty of fixing and ascertaining the actual damages the Owner would in such event sustain. This amount shall be construed as the actual amount of damages sustained by the Owner, and may be retained by the Owner and deducted from periodic payments to the Contractor.
3. Assessment of liquidated damages shall not release Contractor from any further obligations or liabilities pursuant to the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 04 00

SPECIFICATIONS, DRAWINGS, AND OTHER DOCUMENTS

PART 1 - GENERAL

1.01 DISCREPANCIES AND CONTRACT DOCUMENT REVIEW

- A. The intent of the Specifications and Drawings is to describe a complete Project to be constructed in accordance with the Contract Documents. Contractor shall furnish all labor, materials, equipment, tools, transportation, permits, and supplies, and perform the Work required in accordance with the Drawings, Specifications, and other provisions of the Contract Documents.
- B. The Contract Documents are complementary. What is required by one part of the Contract Documents shall be binding as if required by all. Anything mentioned in the Specifications and not shown on the Drawings or shown on the Drawings and not mentioned in the Specifications, shall be of like effect as if shown or mentioned in both.
- C. Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by Owner. If, during the performance of the Work, Contractor finds a conflict, error, inconsistency, or omission in the Contract Documents, it shall promptly and before proceeding with the Work affected thereby, report such conflict, error, inconsistency, or omission to A/E in writing.
- D. Contractor shall do no Work without applicable Drawings, Specifications, or written modifications, or Shop Drawings where required, unless instructed to do so in writing by Owner. If Contractor performs any construction activity, and it knows or reasonably should have known that any of the Contract Documents contain a conflict, error, inconsistency, or omission, Contractor shall be responsible for the performance and shall bear the cost for its correction.
- E. Contractor shall provide any work or materials the provision of which is clearly implied and is within the scope of the Contract Documents even if the Contract Documents do not mention them specifically.
- F. Questions regarding interpretation of the requirements of the Contract Documents shall be referred to the A/E.

1.02 PROJECT RECORD

- A. Contractor shall legibly mark in ink on a separate set of the Drawings and Specifications all actual construction, including depths of foundations, horizontal and vertical locations of internal and underground utilities and appurtenances referenced to permanent visible and accessible surface improvements, field

changes of dimensions and details, actual suppliers, manufacturers and trade names, models of installed equipment, and Change Order Proposals (COP). This separate set of Drawings and Specifications shall be the "Project Record."

- B. The Project Record shall be maintained on the project site throughout the construction and shall be clearly labeled "PROJECT RECORD". The Project Record shall be updated at least weekly noting all changes and shall be available to Owner at all times.
- C. Contractor shall submit the completed and finalized Project Record to A/E prior to Final Acceptance.

1.03 SHOP DRAWINGS

- A. "Shop Drawings" means documents and other information required to be submitted to A/E by Contractor pursuant to the Contract Documents, showing in detail: the proposed fabrication and assembly of structural elements; and the installation (i.e. form, fit, and attachment details) of materials and equipment. Shop Drawings include, but are not limited to, drawings, diagrams, layouts, schematics, descriptive literature, illustrations, schedules, performance and test data, samples, and similar materials furnished by Contractor to explain in detail specific portions of the Work required by the Contract Documents. For materials and equipment to be incorporated into the Work, Contractor submittal shall include the name of the manufacturer, the model number, and other information concerning the performance, capacity, nature, and rating of the item. When directed, Contractor shall submit all samples at its own expense. Owner may duplicate, use, and disclose Shop Drawings provided in accordance with the Contract Documents.
- B. Contractor shall coordinate all Shop Drawings, and review them for accuracy, completeness, and compliance with the Contract Documents and shall indicate its approval thereon as evidence of such coordination and review. Where required by law, Shop Drawings shall be stamped by an appropriate professional licensed by the state of Washington. Shop Drawings submitted to A/E without evidence of Contractor's approval shall be returned for resubmission. Contractor shall review, approve, and submit Shop Drawings with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of Owner or separate contractors. Contractor's submittal schedule shall allow a reasonable time for A/E review. A/E will review, approve, or take other appropriate action on the Shop Drawings. Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings until the respective submittal has been reviewed and the A/E has approved or taken other appropriate action. Owner and A/E shall respond to Shop Drawing submittals with reasonable promptness. Any Work by Contractor shall be in accordance with reviewed Shop Drawings. Submittals made by Contractor which are not required by the Contract Documents may be returned without action.
- C. Approval, or other appropriate action with regard to Shop Drawings, by Owner or A/E shall not relieve Contractor of responsibility for any errors or omissions in such Shop

Drawings, nor from responsibility for compliance with the requirements of the Contract Documents. Unless specified in the Contract Documents, review by Owner or A/E shall not constitute an approval of the safety precautions employed by Contractor during construction or constitute an approval of Contractor's means or methods of construction. If Contractor fails to obtain approval before installation and the item or work is subsequently rejected, Contractor shall be responsible for all costs of correction.

- D. If Shop Drawings show variations from the requirements of the Contract Documents, Contractor shall describe such variations in writing, separate from the Shop Drawings, at the time it submits the Shop Drawings containing such variations. If A/E approves any such variation, an appropriate Change Order will be issued. If the variation is minor and does not involve an adjustment in the Contract Sum or Contract Time, a Change Order need not be issued; however, the modification shall be recorded upon the Project Record.
- E. Unless otherwise provided in Division I, Contractor shall submit to A/E for approval 5 copies of all Shop Drawings. Unless otherwise indicated, 3 sets of all Shop Drawings shall be retained by A/E and 2 sets shall be returned to Contractor.

1.04 ORGANIZATION OF SPECIFICATIONS

- A. Specifications are prepared in sections which conform generally with trade practices. These sections are for Owner and Contractor convenience and shall not control Contractor in dividing the Work among the Subcontractors or in establishing the extent of the Work to be performed by any trade.

1.05 OWNERSHIP AND USE OF DRAWINGS, SPECIFICATIONS, AND OTHER DOCUMENTS

- A. The Drawings, Specifications, and other documents prepared by A/E are instruments of A/E's service through which the Work to be executed by Contractor is described. Neither Contractor nor any Subcontractor shall own or claim a copyright in the Drawings, Specifications, and other documents prepared by A/E, and A/E shall be deemed the author of them and will, along with any rights of Owner, retain all common law, statutory, and other reserved rights, in addition to the copyright. All copies of these documents, except Contractor's set, shall be returned or suitably accounted for to A/E, on request, upon completion of the Work.
- B. The Drawings, Specifications, and other documents prepared by the A/E, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner and A/E. Contractor and Subcontractors are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications, and other documents prepared by A/E appropriate to and for use in the execution of their Work.

- C. Contractor and all Subcontractors grant a non-exclusive license to Owner, without additional cost or royalty, to use for its own purposes (including reproduction) all Shop Drawings, together with the information and diagrams contained therein, prepared by Contractor or any Subcontractor. In providing Shop Drawings, Contractor and all Subcontractors warrant that they have authority to grant to Owner a license to use the Shop Drawings, and that such license is not in violation of any copyright or other intellectual property right. Contractor agrees to defend and indemnify Owner pursuant to the indemnity provisions in Sections 5.03 and 5.22 from any violations of copyright or other intellectual property rights arising out of Owner's use of the Shop Drawings hereunder, or to secure for Owner, at Contractor's own cost, licenses in conformity with this section.
- D. The Shop Drawings and other submittals prepared by Contractor, Subcontractors of any tier, or its or their equipment or material suppliers, and copies thereof furnished to Contractor, are for use solely with respect to this Project. They are not to be used by Contractor or any Subcontractor of any tier, or material or equipment supplier, on other projects or for additions to this Project outside the scope of the Work without the specific written consent of Owner. The Contractor, Subcontractors of any tier, and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Shop Drawings and other submittals appropriate to and for use in the execution of their Work under the Contract Documents.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 00

NON-DISCRIMINATION CLAUSE

PART 1 - GENERAL

1.01 NONDISCRIMINATION

- A. Nondiscrimination Requirement. During the term of this Contract, Contractor, including any subcontractor, shall not discriminate on the bases enumerated at RCW 49.60.530(3). In addition, Contractor, including any subcontractor, shall give written notice of this nondiscrimination requirement to any labor organizations with which Contractor, or subcontractor, has a collective bargaining or other agreement.
- B. Obligation to Cooperate. Contractor, including any subcontractor, shall cooperate and comply with any Washington state agency investigation regarding any allegation that Contractor, including any subcontractor, has engaged in discrimination prohibited by this Contract pursuant to RCW 49.60.530(3).
- C. Default. Notwithstanding any provision to the contrary, Agency may suspend Contractor, including any subcontractor, upon notice of a failure to participate and cooperate with any state agency investigation into alleged discrimination prohibited by this Contract, pursuant to RCW 49.60.530(3). Any such suspension will remain in place until Agency receives notification that Contractor, including any subcontractor, is cooperating with the investigating state agency. In the event Contractor, or subcontractor, is determined to have engaged in discrimination identified at RCW 49.60.530(3), Agency may terminate this Contract in whole or in part, and Contractor, subcontractor, or both, may be referred for debarment as provided in RCW 39.26.200. Contractor or subcontractor may be given a reasonable time in which to cure this noncompliance, including implementing conditions consistent with any court-ordered injunctive relief or settlement agreement.
- D. Remedies for Breach. Notwithstanding any provision to the contrary, in the event of Contract termination or suspension for engaging in discrimination, Contractor, subcontractor, or both, shall be liable for contract damages as authorized by law including, but not limited to, any cost difference between the original contract and the replacement or cover contract and all administrative costs directly related to the replacement contract, which damages are distinct from any penalties imposed under Chapter 49.60, RCW. Agency shall have the right to deduct from any monies due to Contractor or subcontractor, or that thereafter become due, an amount for damages Contractor or subcontractor will owe Agency for default under this provision.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 26 00

CHANGES

PART 1 - GENERAL

1.01 CHANGE IN THE WORK

- A. Owner may, at any time and without notice to Contractor's surety, order additions, deletions, revisions, or other changes in the Work. These changes in the Work shall be incorporated into the Contract Documents through the execution of Change Orders. If any change in the Work ordered by Owner causes an increase or decrease in the Contract Sum or the Contract Time, an equitable adjustment shall be made as provided in section 7.02 or 7.03, respectively, and such adjustment(s) shall be incorporated into a Change Order.
- B. If Owner desires to order a change in the Work, it may request a written Change Order proposal from Contractor. Contractor shall submit a Change Order proposal within 14 days of the request from Owner, or within such other period as mutually agreed. Contractor's Change Order proposal shall be full compensation for implementing the proposed change in the Work, including any adjustment in the Contract Sum or Contract Time, and including compensation for all delays in connection with such change in the Work and for any expense or inconvenience, disruption of schedule, or loss of efficiency or productivity occasioned by the change in the Work.
- C. Upon receipt of the Change Order proposal, or a request for equitable adjustment in the Contract Sum or Contract Time, or both, as provided in sections 7.02 and 7.03, Owner may accept or reject the proposal, request further documentation, or negotiate acceptable terms with Contractor. Pending agreement on the terms of the Change Order, Owner may direct Contractor to proceed immediately with the Change Order Work. Contractor shall not proceed with any change in the Work until it has obtained Owner's approval. All Work done pursuant to any Owner-directed change in the Work shall be executed in accordance with the Contract Documents.
- D. If Owner and Contractor reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, such agreement shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of all claims for time and for direct, indirect, and consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity, related to any Work either covered or affected by the Change Order, or related to the events giving rise to the request for equitable adjustment.
- E. If Owner and Contractor are unable to reach agreement on the terms of any change in the Work, including any adjustment in the Contract Sum or Contract Time, Contractor may at any time in writing, request a final offer from Owner. Owner shall provide Contractor with its written response within 30 days of Contractor's request.

Owner may also provide Contractor with a final offer at any time. If Contractor rejects Owner's final offer, or the parties are otherwise unable to reach agreement, Contractor's only remedy shall be to file a Claim as provided in part 8.

F. Owner may direct Contractor to proceed with a change in the Work through a written Field Authorization (also referred to as a Field Order) when the time required to price and execute a Change Order would impact the Project.

1. The Field Authorization shall describe and include the following:
 - a. The scope of work.
 - b. An agreed upon maximum not-to-exceed amount.
 - c. Any estimated change to the Contract Time.
 - d. The method of final cost determination in accordance with the requirements of Part 7 of the General Conditions.
 - e. The supporting cost data to be submitted in accordance with the requirements of Part 7 of the General Conditions.
 - f. Upon satisfactory submittal by Contractor and approval by Owner of supporting cost data, a Change Order will be executed. Owner will not make payment to Contractor for Field Authorization work until that work has been incorporated into an executed Change Order.

1.02 CHANGE IN CONTRACT SUM

A. General Application

1. The Contract Sum shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Sum in its Change Order proposal.
2. If the cost of Contractor's performance is changed due to the fault or negligence of Owner, or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Sum in accordance with the following procedure. No change in the Contract Sum shall be allowed to the extent: Contractor's changed cost of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible; the change is concurrently caused by Contractor and Owner; or the change is caused by an act of Force Majeure as defined in Section 3.05.
 - a. A request for an equitable adjustment in the Contract Sum shall be based on written notice delivered to Owner within 7 days of the occurrence of the event giving rise to the request. For purposes of this

part, "occurrence" means when Contractor knew, or in its diligent prosecution of the Work should have known, of the event giving rise to the request. If Contractor believes it is entitled to an adjustment in the Contract Sum, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor shall give Owner access to any such records and, if requested shall promptly furnish copies of such records to Owner.

- b. Contractor shall not be entitled to any adjustment in the Contract Sum for any occurrence of events or costs that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Sum; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Sum requested. Failure to properly give such written notice shall constitute a waiver of Contractor's right to an equitable adjustment.
- c. Within 30 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph a. above with additional supporting data. Such additional data shall include, at a minimum: the amount of compensation requested, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the damages claimed, but that the damages claimed were actually a result of the act, event, or condition complained of and that the Contract Documents provide entitlement to an equitable adjustment to Contractor for such act, event, or condition; and documentation sufficiently detailed to permit an informed analysis of the request by Owner. When the request for compensation relates to a delay, or other change in Contract Time, Contractor shall demonstrate the impact on the critical path, in accordance with section 7.03C. Failure to provide such additional information and documentation within the time allowed or within the format required shall constitute a waiver of Contractor's right to an equitable adjustment.
- d. Pending final resolution of any request made in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- e. Any requests by Contractor for an equitable adjustment in the Contract Sum and in the Contract Time that arise out of the same event(s) shall be submitted together.

3. The value of any Work covered by a Change Order, or of any request for an equitable adjustment in the Contract Sum, shall be determined by one of the following methods: a. On the basis of a fixed price as determined in paragraph 7.02B. b. By application of unit prices to the quantities of the items involved as determined in paragraph 7.02C. c. On the basis of time and material as determined in paragraph 7.02D.
4. When Owner has requested Contractor to submit a Change Order proposal, Owner may direct Contractor as to which method in subparagraph 3. above to use when submitting its proposal. Otherwise, Contractor shall determine the value of the Work, or of a request for an equitable adjustment, on the basis of the fixed price method.

B. Change Order Pricing -- Fixed Price

1. When the fixed price method is used to determine the value of any Work covered by a Change Order, or of a request for an equitable adjustment in the Contract Sum, the following procedures shall apply:
 - a. Contractor's Change Order proposal, or request for adjustment in the Contract Sum, shall be accompanied by a complete itemization of the costs, including labor, material, subcontractor costs, and overhead and profit. The costs shall be itemized in the manner set forth below, and shall be submitted on breakdown sheets in a form approved by Owner.
 - b. All costs shall be calculated based upon appropriate industry standard methods of calculating labor, material quantities, and equipment costs.
 - c. If any of Contractor's pricing assumptions are contingent upon anticipated actions of Owner, Contractor shall clearly state them in the proposal or request for an equitable adjustment.
 - d. The cost of any additive or deductive changes in the Work shall be calculated as set forth below, except that overhead and profit shall not be included on deductive changes in the Work. Where a change in the Work involves additive and deductive work by the same Contractor or Subcontractor, small tools, overhead, profit, bond and insurance markups will apply to the net difference.
 - e. If the total cost of the change in the Work or request for equitable adjustment does not exceed \$1,000, Contractor shall not be required to submit a breakdown if the description of the change in the Work or request for equitable adjustment is sufficiently definitive for Owner to determine fair value.
 - f. If the total cost of the change in the Work or request for equitable

adjustment is between \$1,000 and \$2,500, Contractor may submit a breakdown in the following level of detail if the description of the change in the Work or if the request for equitable adjustment is sufficiently definitive to permit the Owner to determine fair value:

- 1) lump sum labor;
- 2) lump sum material;
- 3) lump sum equipment usage;
- 4) overhead and profit as set forth below; and
- 5) insurance and bond costs as set forth below.

2. Any request for adjustment of Contract Sum based upon the fixed price method shall include only the following items:

a. Craft labor costs: These are the labor costs determined by multiplying the estimated or actual additional number of craft hours needed to perform the change in the Work by the hourly labor costs. Craft hours should cover direct labor, as well as indirect labor due to trade inefficiencies. The hourly costs shall be based on the following:

- 1) Basic wages and benefits: Hourly rates and benefits as stated on the Department of Labor and Industries approved "statement of intent to pay prevailing wages." Direct supervision shall be a reasonable percentage not to exceed 15% of the cost of direct labor. No supervision markup shall be allowed for a working supervisor's hours.
- 2) Worker's insurance: Direct contributions to the state of Washington for industrial insurance; medical aid; and supplemental pension, by the class and rates established by the Department of Labor and Industries.
- 3) Federal insurance: Direct contributions required by the Federal Insurance Compensation Act; Federal Unemployment Tax Act; and the State Unemployment Compensation Act.
- 4) Travel allowance: Travel allowance and/or subsistence, if applicable, not exceeding those allowances established by regional labor union agreements, which are itemized and identified separately.
- 5) Safety: Cost incurred due to the Washington Industrial Safety and Health Act, which shall be a reasonable percentage not

to exceed 2% of the sum of the amounts calculated in (1), (2), and (3) above.

- b. Material costs: This is an itemization of the quantity and cost of materials needed to perform the change in the Work. Material costs shall be developed first from actual known costs, second from supplier quotations or if these are not available, from standard industry pricing guides. Material costs shall consider all available discounts. Freight costs, express charges, or special delivery charges, shall be itemized.
- c. Equipment costs: This is an itemization of the type of equipment and the estimated or actual length of time the construction equipment appropriate for the Work is or will be used on the change in the Work. Costs will be allowed for construction equipment only if used solely for the changed Work, or for additional rental costs actually incurred by the Contractor. Equipment charges shall be computed on the basis of actual invoice costs or if owned, from the current edition of one of the following sources:
 - 1) Associated General Contractors - Washington State Department of Transportation (AGC WSDOT) Equipment Rental Agreement current edition as of the Contract execution date.
 - 2) The state of Washington Utilities and Transportation Commission for trucks used on highways.
 - 3) The National Electrical Contractors Association for equipment used on electrical work.
 - 4) The Mechanical Contractors Association of America for equipment used on mechanical work. 5) The Equipment Watch Rental Rate Blue Book shall be used as a basis for establishing rental rates of equipment not listed in the above sources. The maximum rate for standby equipment shall not exceed that shown in the AGC WSDOT Equipment Rental Agreement, current edition as of the Contract execution date.
- d. Allowance for small tools, expendables & consumable supplies: Small tools consist of tools which cost \$250 or less and are normally furnished by the performing contractor. The maximum rate for small tools shall not exceed the following:
 - 1) For Contractor, 3% of direct labor costs.
 - 2) For Subcontractors, 5% of direct labor costs.

- 3) Expendables and consumable supplies directly associated with the change in Work must be itemized.
- e. Subcontractor costs: This is defined as payments Contractor makes to Subcontractors for changed Work performed by Subcontractors of any tier. The Subcontractors' cost of Work shall be calculated and itemized in the same manner as prescribed herein for Contractor.
- f. Allowance for overhead: This is defined as costs of any kind attributable to direct and indirect delay, acceleration, or impact, added to the total cost to Owner of any change in the Contract Sum but not to the cost of any change in the Contract Time for which contractor has been compensated pursuant to the conditions set forth in Section 7.03. This allowance shall compensate Contractor for all Non craft labor, temporary construction facilities, field engineering, schedule updating, as-built drawings, home office cost, B&O taxes, office engineering, estimating costs, additional overhead because of extended time, and any other cost incidental to the change in the Work. It shall be strictly limited in all cases to a reasonable amount, mutually acceptable, or if none can be agreed upon to an amount not to exceed the rates below:
 - 1) For projects where the Contract Award Amount is under \$3 million, the following shall apply:
 - a) For Contractor, for any Work actually performed by Contractor's own forces, 16% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
 - b) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 16% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
 - c) For Contractor, for any work performed by its Subcontractor(s), 6% of the first \$50,000 of the amount due each Subcontractor, and 4% of the remaining amount if any.
 - d) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first \$50,000 of the amount due the sub-Subcontractor, and 2% of the remaining amount if any.
 - e) The cost to which overhead is to be applied shall be determined in accordance with subparagraphs Section 7.02B 7a.-e.

- 2) For projects where the Contract Award Amount is equal to or exceeds \$3 million, the following shall apply:
- a) For Contractor, for any Work actually performed by Contractor's own forces, 12% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
 - b) For each Subcontractor (including lower tier subcontractors), for any Work actually performed by its own forces, 12% of the first \$50,000 of the cost, and 4% of the remaining cost, if any.
 - c) For Contractor, for any Work performed by its Subcontractor(s), 4% of the first \$50,000 of the amount due each Subcontractor, and 2% of the remaining amount if any.
 - d) For each Subcontractor, for any Work performed by its Subcontractor(s) of any lower tier, 4% of the first \$50,000 of the amount due the sub-Subcontractor, and 2% of the remaining amount if any.
 - e) The cost to which overhead is to be applied shall be determined in accordance with subparagraphs Section 7.02B 7a.-e. g. Allowance for profit: This is an amount to be added to the cost of any change in contract sum, but not to the cost of change in Contract Time for which contractor has been compensated pursuant to the conditions set forth in section 7.03. It shall be limited to a reasonable amount, mutually acceptable, or if none can be agreed upon, to an amount not to exceed the rates below:
 - I) For Contractor or Subcontractor of any tier for work performed by their forces, 6% of the cost developed in accordance with Section 7.02 b. 7a.-e.
 - II) For Contractor or Subcontractor of any tier for work performed by a subcontractor of a lower tier, 4% of the Subcontractor cost developed in accordance with Section 7.02 b. 7a.-h.
 - f) Cost of change in insurance or bond premium: This is defined as:
 - I) Contractor's liability insurance: The cost of

any changes in Contractor's liability insurance arising directly from execution of the Change Order; and

II) Public works bond: The cost of the additional premium for Contractor's bond arising directly from the changed Work.

g) The costs of any change in insurance or bond premium shall be added after overhead and allowance for profit are calculated in accordance with subparagraph f. and g. above.

C. Change Order Pricing -- Unit Prices

1. Whenever Owner authorizes Contractor to perform Work on a unit-price basis, Owner's authorization shall clearly state:
 - a. Scope of work to be performed;
 - b. Type of reimbursement including pre-agreed rates for material quantities; and
 - c. Cost limit of reimbursement.
2. Contractor shall:
 - a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, Contractor shall identify workers assigned to the Change Order Work and areas in which they are working;
 - b. Leave access as appropriate for quantity measurement; and
 - c. Not exceed any cost limit(s) without Owner's prior written approval.
3. Contractor shall submit costs in accordance with paragraph 7.02B. and satisfy the following requirements:
 - a. Unit prices shall include reimbursement for all direct and indirect costs of the Work, including overhead and profit, and bond and insurance costs; and
 - b. Quantities must be supported by field measurement statements signed by Owner.

D. Change Order Pricing -- Time-and-Material Prices

1. Whenever Owner authorizes Contractor to perform Work on a time-and-

material basis, Owner's authorization shall clearly state:

- a. Scope of Work to be performed;
- b. Type of reimbursement including pre-agreed rates, if any, for material quantities or labor; and
- c. Cost limit of reimbursement.

2. Contractor shall:

- a. Cooperate with Owner and assist in monitoring the Work being performed. As requested by Owner, identify workers assigned to the Change Order Work and areas in which they are working;
- b. Identify on daily time sheets all labor performed in accordance with this authorization. Submit copies of daily time sheets within 2 working days for Owner's review;
- c. Leave access as appropriate for quantity measurement;
- d. Perform all Work in accordance with this section as efficiently as possible; and
- e. Not exceed any cost limit(s) without Owner's prior written approval.

3. Contractor shall submit costs in accordance with paragraph 7.02B and additional verification supported by:

- a. Labor detailed on daily time sheets; and b. Invoices for material.

1.03 CHANGE IN CONTRACT TIME

- A. The Contract Time shall only be changed by a Change Order. Contractor shall include any request for a change in the Contract Time in its Change Order proposal.
- B. If the time of Contractor's performance is changed due to an act of Force Majeure, or due to the fault or negligence of Owner or anyone for whose acts Owner is responsible, Contractor shall be entitled to make a request for an equitable adjustment in the Contract Time in accordance with the following procedure. No adjustment in the Contract Time shall be allowed to the extent Contractor's changed time of performance is due to the fault or negligence of Contractor, or anyone for whose acts Contractor is responsible.
 - 1. 1A request for an equitable adjustment in the Contract Time shall be based on written notice delivered within 7 days of the occurrence of the event giving rise to the request. If Contractor believes it is entitled to adjustment of Contract Time, Contractor shall immediately notify Owner and begin to keep and maintain complete, accurate, and specific daily records. Contractor

shall give Owner access to any such record and if requested, shall promptly furnish copies of such record to Owner.

2. Contractor shall not be entitled to an adjustment in the Contract Time for any events that occurred more than 7 days before Contractor's written notice to Owner. The written notice shall set forth, at a minimum, a description of: the event giving rise to the request for an equitable adjustment in the Contract Time; the nature of the impacts to Contractor and its Subcontractors of any tier, if any; and to the extent possible the amount of the adjustment in Contract Time requested. Failure to properly give such written notice shall constitute a waiver of Contractor's right to an equitable adjustment.
 3. Within 30 days of the occurrence of the event giving rise to the request, unless Owner agrees in writing to allow an additional period of time to ascertain more accurate data, Contractor shall supplement the written notice provided in accordance with subparagraph 7.03B.2 with additional supporting data. Such additional data shall include, at a minimum: the amount of delay claimed, itemized in accordance with the procedure set forth herein; specific facts, circumstances, and analysis that confirms not only that Contractor suffered the delay claimed, but that the delay claimed was actually a result of the act, event, or condition complained of, and that the Contract Documents provide entitlement to an equitable adjustment in Contract Time for such act, event, or condition; and supporting documentation sufficiently detailed to permit an informed analysis of the request by Owner. Failure to provide such additional information and documentation within the time allowed or within the format required shall constitute a waiver of Contractor's right to an equitable adjustment.
 4. Pending final resolution of any request in accordance with this paragraph, unless otherwise agreed in writing, Contractor shall proceed diligently with performance of the Work.
- C. Any change in the Contract Time covered by a Change Order, or based on a request for an equitable adjustment in the Contract Time, shall be limited to the change in the critical path of Contractor's schedule attributable to the change of Work or event(s) giving rise to the request for equitable adjustment. Any Change Order proposal or request for an adjustment in the Contract Time shall demonstrate the impact on the critical path of the schedule. Contractor shall be responsible for showing clearly on the Progress Schedule that the change or event: had a specific impact on the critical path, and except in case of concurrent delay, was the sole cause of such impact; and could not have been avoided by resequencing of the Work or other reasonable alternatives.
- D. Contractor may request compensation for the cost of a change in Contract Time in accordance with this paragraph, 7.03D, subject to the following conditions:
1. The change in Contract Time shall solely be caused by the fault or negligence of Owner or A/E;

2. Compensation under this paragraph is limited to changes in Contract Time for which Contractor is not entitled to be compensated under section 7.02;
3. Contractor shall follow the procedure set forth in paragraph 7.03B;
4. Contractor shall establish the extent of the change in Contract Time in accordance with paragraph 7.03C; and
5. The daily cost of any change in Contract Time shall be limited to the items below, less funds that may have been paid pursuant to a change in the Contract Sum that contributed to this change in Contract Time:
 - a. cost of nonproductive field supervision or labor extended because of the delay;
 - b. cost of weekly meetings or similar indirect activities extended because of the delay;
 - c. cost of temporary facilities or equipment rental extended because of the delay;
 - d. cost of insurance extended because of the delay;
 - e. general and administrative overhead in an amount to be agreed upon, but not to exceed 3% of Contract Sum divided by the Contract Time for each day of the delay.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 29 00

PAYMENTS AND COMPLETION

PART 1 - GENERAL

1.01 CONTRACT SUM

- A. Owner shall pay Contractor the Contract Sum for performance of the Work, in accordance with the Contract Documents.

1.02 SCHEDULE OF VALUES

- A. Before submitting its first Application for Payment, Contractor shall submit to Owner for approval a breakdown allocating the total Contract Sum to each principle category of work, in such detail as requested by Owner ("Schedule of Values"). The approved Schedule of Values shall include appropriate amounts for demobilization, record drawings, O&M manuals, and any other requirements for Project closeout, and shall be used by Owner as the basis for progress payments. Payment for Work shall be made only for and in accordance with those items included in the Schedule of Values.

1.03 APPLICATION FOR PAYMENT

- A. At monthly intervals at least thirty days before the 10th or 25th day of each month, unless determined otherwise by Owner, Contractor shall submit to Owner an itemized Application for Payment for Work completed in accordance with the Contract Documents and the approved Schedule of Values. Each application shall be supported by such substantiating data as Owner may require.
- B. By submitting an Application for Payment, Contractor is certifying that all Subcontractors have been paid, less earned retainage in accordance with RCW 60.28.010, as their interests appeared in the last preceding certificate of payment. By submitting an Application for Payment, Contractor is recertifying that the representations set forth in section 1.03 are true and correct, to the best of Contractor's knowledge, as of the date of the Application for Payment.
- C. At the time it submits an Application for Payment, Contractor shall analyze and reconcile, to the satisfaction of Owner, the actual progress of the Work with the Progress Schedule.
- D. If authorized by Owner, the Application for Payment may include request for payment for material delivered to the Project site and suitably stored, or for completed preparatory work. Payment may similarly be requested for material stored off the Project site, provided Contractor complies with or furnishes satisfactory evidence of the following:

1. The material will be placed in a warehouse that is structurally sound, dry, lighted and suitable for the materials to be stored;
2. The warehouse is located within a 10-mile radius of the Project. Other locations may be utilized, if approved in writing, by Owner;
3. Only materials for the Project are stored within the warehouse (or a secure portion of a warehouse set aside for the Project);
4. Contractor furnishes Owner a certificate of insurance extending Contractor's insurance coverage for damage, fire, and theft to cover the full value of all materials stored, or in transit;
5. The warehouse (or secure portion thereof) is continuously under lock and key, and only Contractor's authorized personnel shall have access;
6. Owner shall at all times have the right of access in company of Contractor;
7. Contractor and its surety assume total responsibility for the stored materials; and
8. Contractor furnishes to Owner certified lists of materials stored, bills of lading, invoices, and other information as may be required, and shall also furnish notice to Owner when materials are moved from storage to the Project site.

1.04 PROGRESS PAYMENTS

- A. Owner shall make progress payments on the 10th or 25th of each calendar month, in the manner and within the time provided in the Contract Documents, in such amounts as Owner determines are properly due, after receipt of a properly executed Application for Payment. Owner shall notify Contractor in accordance with RCW 39.76 if the Application for Payment does not comply with the requirements of the Contract Documents.
- B. Owner shall retain 5% of the amount of each progress payment until 45 days after Final Acceptance and receipt of all documents required by law or the Contract Documents, including, at Owner's request, consent of surety to release of the retainage. In accordance with RCW 60.28, Contractor may request that monies reserved be retained in a fund by Owner, deposited by Owner in a bank or savings and loan, or placed in escrow with a bank or trust company to be converted into bonds and securities to be held in escrow with interest to be paid to Contractor. Owner may permit Contractor to provide an appropriate bond in lieu of the retained funds.
- C. Title to all Work and materials covered by a progress payment shall pass to Owner at the time of such payment free and clear of all liens, claims, security interests, and encumbrances. Passage of title shall not, however, relieve Contractor from any of its duties and responsibilities for the Work or materials, or waive any rights of Owner to

insist on full compliance by Contractor with the Contract Documents.

- D. Payments due and unpaid in accordance with the Contract Documents shall bear interest as specified in RCW 39.76.

1.05 PAYMENTS WITHHELD

- A. Owner may withhold or, on account of subsequently discovered evidence, nullify the whole or part of any payment to such extent as may be necessary to protect Owner from loss or damage for reasons including but not limited to:
 - 1. Work not in accordance with the Contract Documents;
 - 2. Reasonable evidence that the Work required by the Contract Documents cannot be completed for the unpaid balance of the Contract Sum;
 - 3. Work by Owner to correct defective Work or complete the Work in accordance with section 5.16;
 - 4. Failure to perform in accordance with the Contract Documents; or
 - 5. Cost or liability that may occur to Owner as the result of Contractor's fault or negligent acts or omissions.
- B. In any case where part or all of a payment is going to be withheld for unsatisfactory performance, Owner shall notify Contractor in accordance with RCW 39.76.

1.06 RETAINAGE AND BOND CLAIM RIGHTS

- A. RCW chapters 39.08 and 60.28, concerning the rights and responsibilities of Contractor and Owner with regard to the performance and payment bonds and retainage, are made a part of the Contract Documents by reference as though fully set forth herein.

1.07 SUBSTANTIAL COMPLETION

- A. Substantial Completion is the stage in the progress of the Work (or portion thereof designated and approved by Owner) when the construction is sufficiently complete, in accordance with the Contract Documents, so Owner has full and unrestricted use and benefit of the facilities (or the portion thereof designate and approved by Owner) for the use for which it is intended. All Work other than incidental corrective or punch list work shall be completed. Substantial Completion shall not have been achieved if all systems and parts are not functional, if utilities are not connected and operating normally, if all required occupancy permits have not been issued, or if the Work is not accessible by normal vehicular and pedestrian traffic routes. The date Substantial Completion is achieved shall be established in writing by Owner. Contractor may request an early date of Substantial Completion which must be approved by Change Order. Owner's occupancy of the Work or designated portion thereof does not

necessarily indicate that Substantial Completion has been achieved.

1.08 PRIOR OCCUPANCY

- A. Owner may, upon written notice thereof to Contractor, take possession of or use any completed or partially completed portion of the Work ("Prior Occupancy") at any time prior to Substantial Completion. Unless otherwise agreed in writing, Prior Occupancy shall not: be deemed an acceptance of any portion of the Work; accelerate the time for any payment to Contractor; prejudice any rights of Owner provided by any insurance, bond, guaranty, or the Contract Documents; relieve Contractor of the risk of loss or any of the obligations established by the Contract Documents; establish a date for termination or partial termination of the assessment of liquidated damages; or constitute a waiver of claims.
- B. Notwithstanding anything in the preceding paragraph, Owner shall be responsible for loss of or damage to the Work resulting from Prior Occupancy. Contractor's one year duty to repair and any system warranties shall begin on building systems activated and used by Owner as agreed in writing by Owner and Contractor.

1.09 FINAL COMPLETION, ACCEPTANCE, AND PAYMENT

- A. Final Completion shall be achieved when the Work is fully and finally complete in accordance with the Contract Documents. The date Final Completion is achieved shall be established by Owner in writing, but in no case shall constitute Final Acceptance which is a subsequent, separate, and distinct action.
- B. Final Acceptance is the formal action of Owner acknowledging Final Completion. Prior to Final Acceptance, Contractor shall, in addition to all other requirements in the Contract Documents, submit to Owner a written notice of any outstanding disputes or claims between Contractor and any of its Subcontractors, including the amounts and other details thereof. Neither Final Acceptance, nor final payment, shall release Contractor or its sureties from any obligations of these Contract Documents or the Public Works Bond, or constitute a waiver of any claims by Owner arising from Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Acceptance of final payment by Contractor, or any Subcontractor, shall constitute a waiver and release to Owner of all claims by Contractor, or any such Subcontractor, for an increase in the Contract Sum or the Contract Time, and for every act or omission of Owner relating to or arising out of the Work, except for those Claims made in accordance with the procedures, including the time limits, set forth in part 8.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 30 00

CLAIMS AND DISPUTE RESOLUTION

PART 1 - GENERAL

1.01 CLAIMS PROCEDURE

- A. If the parties fail to reach agreement on the terms of any Change Order for Owner-directed Work as provided in Section 7.01, or on the resolution of any request for an equitable adjustment in the Contract Sum as provided in section 7.02 or the Contract Time as provided in section 7.03, Contractor's only remedy shall be to file a Claim with Owner as provided in this section.
- B. Contractor shall file its Claim within the earlier of: 120 days from Owner's final offer in accordance with either paragraph 7.01E or the date of Final Acceptance.
- C. The Claim shall be deemed to cover all changes in cost and time (including direct, indirect, impact, and consequential) to which Contractor may be entitled. It shall be fully substantiated and documented. At a minimum, the Claim shall contain the following information:
 - 1. A detailed factual statement of the Claim for additional compensation and time, if any, providing all necessary dates, locations, and items of Work affected by the Claim;
 - 2. The date on which facts arose which gave rise to the Claim
 - 3. The name of each employee of Owner or A/E knowledgeable about the Claim;
 - 4. The specific provisions of the Contract Documents which support the Claim;
 - 5. The identification of any documents and the substance of any oral communications that support the Claim;
 - 6. Copies of any identified documents, other than the Contract Documents, that support the Claim;
 - 7. If an adjustment in the Contract Time is sought: the specific days and dates for which it is sought; the specific reasons Contractor believes an extension in the Contract Time should be granted; and Contractor's analysis of its Progress Schedule to demonstrate the reason for the extension in Contract Time;
 - 8. If an adjustment in the Contract Sum is sought, the exact amount sought and a breakdown of that amount into the categories set forth in, and in the detail required by, section 7.02; and

9. A statement certifying, under penalty of perjury, that the Claim is made in good faith, that the supporting cost and pricing data are true and accurate to the best of Contractor's knowledge and belief, that the Claim is fully supported by the accompanying data, and that the amount requested accurately reflects the adjustment in the Contract Sum or Contract Time for which Contractor believes Owner is liable.
- D. After Contractor has submitted a fully documented Claim that complies with all applicable provisions of parts 7 and 8, Owner shall respond, in writing, to Contractor as follows:
1. If the Claim amount is less than \$50,000, with a decision within 60 days from the date the Claim is received; or
 2. If the Claim amount is \$50,000 or more, with a decision within 60 days from the date the Claim is received, or with notice to Contractor of the date by which it will render its decision. Owner will then respond with a written decision in such additional time.
- E. To assist in the review of Contractor's Claim, Owner may visit the Project site, or request additional information, in order to fully evaluate the issues raised by the Claim. Contractor shall proceed with performance of the Work pending final resolution of any Claim. Owner's written decision as set forth above shall be final and conclusive as to all matters set forth in the Claim, unless Contractor follows the procedure set forth in section 8.02.
- F. Any Claim of the Contractor against the Owner for damages, additional compensation, or additional time, shall be conclusively deemed to have been waived by the Contractor unless timely made in accordance with the requirements of this section.

1.02 ARBITRATION

- A. If Contractor disagrees with Owner's decision rendered in accordance with paragraph 8.01D, Contractor shall provide Owner with a written demand for arbitration. No demand for arbitration of any such Claim shall be made later than 30 days after the date of Owner's decision on such Claim; failure to demand arbitration within said 30-day period shall result in Owner's decision being final and binding upon Contractor and its Subcontractors.
- B. Notice of the demand for arbitration shall be filed with the American Arbitration Association (AAA), with a copy provided to Owner. The parties shall negotiate or mediate under the Voluntary Construction Mediation Rules of the AAA, or mutually acceptable service, before seeking arbitration in accordance with the Construction Industry Arbitration Rules of AAA as follows:
1. Disputes involving \$30,000 or less shall be conducted in accordance with the Northwest Region Expedited Commercial Arbitration Rules; or

2. Disputes over \$30,000 shall be conducted in accordance with the Construction Industry Arbitration Rules of the AAA, unless the parties agree to use the expedited rules.
- C. All Claims arising out of the Work shall be resolved by arbitration. The judgment upon the arbitration award may be entered, or review of the award may occur, in the superior court having jurisdiction thereof. No independent legal action relating to or arising from the Work shall be maintained.
- D. Claims between Owner and Contractor, Contractor and its Subcontractors, Contractor and A/E, and Owner and A/E shall, upon demand by Owner, be submitted in the same arbitration or mediation.
- E. If the parties resolve the Claim prior to arbitration judgment, the terms of the resolution shall be incorporated in a Change Order. The Change Order shall constitute full payment and final settlement of the Claim, including all claims for time and for direct, indirect, or consequential costs, including costs of delays, inconvenience, disruption of schedule, or loss of efficiency or productivity.

1.03 CLAIMS AUDITS

- A. All Claims filed against Owner shall be subject to audit at any time following the filing of the Claim. Failure of Contractor, or Subcontractors of any tier, to maintain and retain sufficient records to allow Owner to verify all or a portion of the Claim or to permit Owner access to the books and records of Contractor, or Subcontractors of any tier, shall constitute a waiver of the Claim and shall bar any recovery.
- B. In support of Owner audit of any Claim, Contractor shall, upon request, promptly make available to Owner the following documents:
 1. Daily time sheets and supervisor's daily reports;
 2. Collective bargaining agreements;
 3. Insurance, welfare, and benefits records;
 4. Payroll registers;
 5. Earnings records;
 6. Payroll tax forms;
 7. Material invoices, requisitions, and delivery confirmations;
 8. Material cost distribution worksheet;
 9. Equipment records (list of company equipment, rates, etc.);
 10. Vendors', rental agencies', Subcontractors', and agents' invoices;

11. Contracts between Contractor and each of its Subcontractors, and all lower-tier Subcontractor contracts and supplier contracts;
 12. Subcontractors' and agents' payment certificates;
 13. Cancelled checks (payroll and vendors);
 14. Job cost report, including monthly totals;
 15. Job payroll ledger;
 16. Planned resource loading schedules and summaries;
 17. General ledger;
 18. Cash disbursements journal;
 19. Financial statements for all years reflecting the operations on the Work. In addition, the Owner may require, if it deems it appropriate, additional financial statements for 3 years preceding execution of the Work;
 20. Depreciation records on all company equipment whether these records are maintained by the company involved, its accountant, or others;
 21. If a source other than depreciation records is used to develop costs for Contractor's internal purposes in establishing the actual cost of owning and operating equipment, all such other source documents;
 22. All nonprivileged documents which relate to each and every Claim together with all documents which support the amount of any adjustment in Contract Sum or Contract Time sought by each Claim;
 23. Work sheets or software used to prepare the Claim establishing the cost components for items of the Claim including but not limited to labor, benefits and insurance, materials, equipment, Subcontractors, all documents which establish the time periods, individuals involved, the hours for the individuals, and the rates for the individuals; and
 24. Work sheets, software, and all other documents used by Contractor to prepare its bid.
- C. The audit may be performed by employees of Owner or a representative of Owner. Contractor, and its Subcontractors, shall provide adequate facilities acceptable to Owner, for the audit during normal business hours. Contractor, and all Subcontractors, shall make a good faith effort to cooperate with Owner's auditors.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 31 00

TERMINATION

PART 1 - GENERAL

1.01 TERMINATION BY OWNER FOR CAUSE

- A. Owner may, upon 7 days written notice to Contractor and to its surety, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for cause upon the occurrence of any one or more of the following events:
1. Contractor fails to prosecute the Work or any portion thereof with sufficient diligence to ensure Substantial Completion of the Work within the Contract Time;
 2. Contractor is adjudged bankrupt, makes a general assignment for the benefit of its creditors, or a receiver is appointed on account of its insolvency;
 3. Contractor fails in a material way to replace or correct Work not in conformance with the Contract Documents;
 4. Contractor repeatedly fails to supply skilled workers or proper materials or equipment;
 5. Contractor repeatedly fails to make prompt payment due to Subcontractors or for labor;
 6. Contractor materially disregards or fails to comply with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or
 7. Contractor is otherwise in material breach of any provision of the Contract Documents.
- B. Upon termination, Owner may at its option:
1. Take possession of the Project site and take possession of or use all materials, equipment, tools, and construction equipment and machinery thereon owned by Contractor to maintain the orderly progress of, and to finish, the Work;
 2. Accept assignment of subcontracts pursuant to section 5.21; and
 3. Finish the Work by whatever other reasonable method it deems expedient.
- C. Owner's rights and duties upon termination are subject to the prior rights and duties of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

- D. When Owner terminates the Work in accordance with this section, Contractor shall take the actions set forth in paragraph 9.02B, and shall not be entitled to receive further payment until the Work is accepted.
- E. If the unpaid balance of the Contract Sum exceeds the cost of finishing the Work, including compensation for A/E's services and expenses made necessary thereby and any other extra costs or damages incurred by Owner in completing the Work, or as a result of Contractor's actions, such excess shall be paid to Contractor. If such costs exceed the unpaid balance, Contractor shall pay the difference to Owner. These obligations for payment shall survive termination.
- F. Termination of the Work in accordance with this section shall not relieve Contractor or its surety of any responsibilities for Work performed.
- G. If Owner terminates Contractor for cause, and it is later determined that none of the circumstances set forth in paragraph 9.01A exist, then such termination shall be deemed a termination for convenience pursuant to section 9.02.

1.02 TERMINATION BY OWNER FOR CONVENIENCE

- A. Owner may, upon written notice, terminate (without prejudice to any right or remedy of Owner) the Work, or any part of it, for the convenience of Owner.
- B. Unless Owner directs otherwise, after receipt of a written notice of termination for either cause or convenience, Contractor shall promptly:
 - 1. Stop performing Work on the date and as specified in the notice of termination;
 - 2. Place no further orders or subcontracts for materials, equipment, services or facilities, except as may be necessary for completion of such portion of the Work as is not terminated;
 - 3. Cancel all orders and subcontracts, upon terms acceptable to Owner, to the extent that they relate to the performance of Work terminated;
 - 4. Assign to Owner all of the right, title, and interest of Contractor in all orders and subcontracts;
 - 5. Take such action as may be necessary or as directed by Owner to preserve and protect the Work, Project site, and any other property related to this Project in the possession of Contractor in which Owner has an interest; and
 - 6. Continue performance only to the extent not terminated.
- C. If Owner terminates the Work or any portion thereof for convenience, Contractor shall be entitled to make a request for an equitable adjustment for its reasonable direct costs incurred prior to the effective date of the termination, plus a reasonable

allowance for overhead and profit on Work performed prior to termination, plus the reasonable administrative costs of the termination, but shall not be entitled to any other costs or damages, whatsoever, provided however, the sum payable upon termination shall not exceed the Contract Sum reduced by prior payments. Contractor shall be required to make its request in accordance with the provisions of part 7.

- D. If Owner terminates the Work or any portion thereof for convenience, the Contract Time shall be adjusted as determined by Owner.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 32 00

MISCELLANEOUS PROVISIONS

PART 1 - GENERAL

1.01 GOVERNING LAW

- A. The Contract Documents and the rights of the parties herein shall be governed by the laws of the state of Washington. Venue shall be in Kitsap County, unless otherwise specified.

1.02 SUCCESSORS AND ASSIGNS

- A. Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other party hereto and to partners, successors, assigns, and legal representatives of such other party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither party shall assign the Work without written consent of the other, except that Contractor may assign the Work for security purposes, to a bank or lending institution authorized to do business in the state of Washington. If either party attempts to make such an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations set forth in the Contract Documents.

1.03 MEANING OF WORDS

- A. Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the code of any governmental authority, whether such reference be specific or by implication, shall be to the latest standard specification, manual, or code in effect on the date for submission of bids, except as may be otherwise specifically stated. Wherever in these Drawings and Specifications an article, device, or piece of equipment is referred to in the singular manner, such reference shall apply to as many such articles as are shown on the drawings or required to complete the installation.

1.04 RIGHTS AND REMEDIES

- A. No action or failure to act by Owner or A/E shall constitute a waiver of a right or duty afforded them under the Contract Documents, nor shall such action or failure to act constitute approval of an acquiescence in a breach therein, except as may be specifically agreed in writing.

1.05 CONTRACTOR REGISTRATION

- A. Pursuant to RCW 39.06, Contractor shall be registered or licensed as required by the laws of the State of Washington, including but not limited to RCW 18.27.

1.06 TIME COMPUTATIONS

- A. When computing any period of time, the day of the event from which the period of time begins shall not be counted. The last day is counted unless it falls on a weekend or legal holiday, in which event the period runs until the end of the next day that is not a weekend or holiday. When the period of time allowed is less than 7 days, intermediate Saturdays, Sundays, and legal holidays are excluded from the computation.

1.07 RECORDS RETENTION

- A. The wage, payroll, and cost records of Contractor, and its Subcontractors, and all records subject to audit in accordance with section 8.03, shall be retained for a period of not less than 6 years after the date of Final Acceptance.

1.08 THIRD-PARTY AGREEMENTS

- A. The Contract Documents shall not be construed to create a contractual relationship of any kind between: A/E and Contractor; Owner and any Subcontractor; or any persons other than Owner and Contractor.

1.09 ANTITRUST ASSIGNMENT

- A. Owner and Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are in fact usually borne by the purchaser. Therefore, Contractor hereby assigns to Owner any and all claims for such overcharges as to goods, materials, and equipment purchased in connection with the Work performed in accordance with the Contract Documents, except as to overcharges which result from antitrust violations commencing after the Contract Sum is established and which are not passed on to Owner under a Change Order. Contractor shall put a similar clause in its Subcontracts, and require a similar clause in its sub-Subcontracts, such that all claims for such overcharges on the Work are passed to Owner by Contractor.

1.10 HEADINGS AND CAPTIONS

- A. All headings and captions used in these General Conditions are only for convenience of reference and shall not be used in any way in connection with the meaning, effect, interpretation, construction, or enforcement of the General Conditions, and do not define the limit or describe the scope or intent of any provision of these General Conditions.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION 01 81 00

PERFORMANCE

PART 1 - GENERAL

1.01 CONTRACTOR CONTROL AND SUPERVISION

- A. Contractor shall supervise and direct the Work, using its best skill and attention, and shall perform the Work in a skillful manner. Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, and procedures and for coordinating all portions of the Work, unless the Contract Documents give other specific instructions concerning these matters. Contractor shall disclose its means and methods of construction when requested by Owner.
- B. Performance of the Work shall be directly supervised by a competent superintendent who has authority to act for Contractor. The superintendent must be satisfactory to Owner and shall not be changed without the prior written consent of Owner. Owner may require Contractor to remove the superintendent from the Work or Project site, if Owner reasonable deems the superintendent incompetent, careless, or otherwise objectionable, provided Owner has first notified Contractor in writing and allowed a reasonable period for transition.
- C. Contractor shall be responsible to Owner for acts and omissions of Contractor, Subcontractors, and their employees and agents.
- D. Contractor shall enforce strict discipline and good order among Contractor's employees and other persons performing the Work. Contractor shall not permit employment of persons not skilled in tasks assigned to them. Contractor's employees shall at all times conduct business in a manner which assures fair, equal, and nondiscriminatory treatment of all persons. Owner may, by written notice, request Contractor to remove from the Work or Project site any employee Owner reasonably deems incompetent, careless, or otherwise objectionable.
- E. Contractor shall keep on the Project site a copy of the Drawings, Specifications, addenda, reviewed Shop Drawings, and permits and permit drawings.
- F. Contractor shall ensure that its owner(s) and employees, and those of its Subcontractors, comply with the Ethics in Public Service Act RCW 42.52, which, among other things, prohibits state employees from having an economic interest in any public works contract that was made by, or supervised by, that employee. Contractor shall remove, at its sole cost and expense, any of its, or its Subcontractors', employees, if they are in violation of this act.

1.02 PERMITS, FEES, AND NOTICES

- A. Unless otherwise provided in the Contract Documents, Owner shall pay for and

obtain all permits, and licenses required for proper execution and completion of the Work. Prior to Final Acceptance, the approved, signed permits shall be delivered to Owner.

Contractor is responsible for requesting all inspections required for proper execution and completion of the Work.

- B. If allowances for permits or utility fees are called for in the Contract Documents and set forth in Contractor's bid, and the actual costs of those permits or fees differ from the allowances in the Contract Documents, the difference shall be adjusted by Change Order.
- C. Contractor shall comply with and give notices required by all federal, state, and local laws, ordinances, rules, regulations, and lawful orders of public authorities applicable to performance of the Work.

1.03 PATENTS AND ROYALTIES

- A. Contractor is responsible for, and shall pay, all royalties and license fees. Contractor shall defend, indemnify, and hold Owner harmless from any costs, expenses, and liabilities arising out of the infringement by Contractor of any patent, copyright, or other intellectual property right used in the Work; however, provided that Contractor gives prompt notice, Contractor shall not be responsible for such defense or indemnity when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents. If Contractor has reason to believe that use of the required design, process, or product constitutes an infringement of a patent or copyright, it shall promptly notify Owner of such potential infringement.

1.04 PREVAILING WAGES

- A. Contractor shall pay the prevailing rate of wages to all workers, laborers, or mechanics employed in the performance of any part of the Work in accordance with RCW 39.12 and the rules and regulations of the Department of Labor and Industries. The schedule of prevailing wage rates for the locality or localities of the Work, is determined by the Industrial Statistician of the Department of Labor and Industries. It is the Contractor's responsibility to verify the applicable prevailing wage rate.
- B. Before payment is made by Owner to Contractor for any work performed by Contractor and subcontractors whose work is included in the application for payment, Contractor shall submit, or shall have previously submitted to Owner for the Project, a Statement of Intent to Pay Prevailing Wages, approved by the Department of Labor & Industries, certifying the rate of hourly wages paid and to be paid each classification of laborers, workers, or mechanics employed upon the Work by Contractor and its subcontractors. Such rates of hourly wages shall not be less than the prevailing wage rate for job site, Bainbridge Island, Kitsap County, Washington.

- C. Prior to release of retainage, Contractor shall submit to Owner an Affidavit of Wages Paid, approved by the Department of Labor & Industries, for Contractor and every subcontractor, or any tier, that performed work on the Project.
- D. Disputes regarding prevailing wage rates shall be referred for arbitration to the Director of the Department of Labor and Industries. The arbitration decision shall be final and conclusive and binding on all parties involved in the dispute as provided for by RCW 39.12.060.
- E. Each Application for Payment submitted by Contractor shall state that prevailing wages have been paid in accordance with the pre-filed statement(s) of intent, as approved. Copies of the approved intent statement(s) shall be posted on the job site with the address and telephone number of the Industrial Statistician of the Department of Labor and Industries where a complaint or inquiry concerning prevailing wages may be made.
- F. In compliance with chapter 296-127 WAC, Contractor shall pay to the Department of Labor and Industries the currently established fee(s) for each statement of intent and/or affidavit of wages paid submitted to the Department of Labor and Industries for certification.
- G. Consistent with WAC 296-127-320, the Contractor and any subcontractor shall submit a certified copy of payroll records if requested.

1.05 HOURS OF LABOR

- A. Contractor shall comply with all applicable provisions of RCW 49.28 and they are incorporated herein by reference. Pursuant to that statute, no laborer, worker, or mechanic employed by Contractor, any Subcontractor, or any other person performing or contracting to do the whole or any part of the Work, shall be permitted or required to work more than eight hours in any one calendar day, provided, that in cases of extraordinary emergency, such as danger to life or property, the hours of work may be extended, but in such cases the rate of pay for time employed in excess of eight hours of each calendar day shall be not less than one and one-half times the rate allowed for this same amount of time during eight hours' service.
- B. Notwithstanding the preceding paragraph, RCW 49.28 permits a contractor or subcontractor in any public works contract subject to those provisions, to enter into an agreement with its employees in which the employees work up to ten hours in a calendar day. No such agreement may provide that the employees work ten-hour days for more than four calendar days a week. Any such agreement is subject to approval by the employees. The overtime provisions of RCW 49.28 shall not apply to the hours, up to forty hours per week, worked pursuant to any such agreement.

1.06 NONDISCRIMINATION

- A. Discrimination in all phases of employment is prohibited by, among other laws and regulations, Title VII of the Civil Rights Act of 1964, the Vietnam Era Veterans

Readjustment Act of 1974, sections 503 and 504 of the Vocational Rehabilitation Act of 1973, the Equal Employment Act of 1972, the Age Discrimination Act of 1967, the Americans with Disabilities Act of 1990, the Civil Rights Act of 1991, Presidential Executive Order 11246, Executive Order 11375, the Washington State Law Against Discrimination, RCW 49.60, and Gubernatorial Executive Order 85-09. These laws and regulations establish minimum requirements for affirmative action and fair employment practices which Contractor must meet.

B. During performance of the Work:

1. Contractor shall not discriminate against any employee or applicant for employment because of race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability, Vietnam era veteran status, or disabled veteran status, nor commit any other unfair practices as defined in RCW 49.60.
2. Contractor shall, in all solicitations or advertisements for employees placed by or for it, state that all qualified applicants will be considered for employment, without regard to race, creed, color, national origin, sex, age, marital status, or the presence of any physical, sensory, or mental disability.
3. Contractor shall send to each labor union, employment agency, or representative of workers with which it has a collective bargaining agreement or other contract or understanding, a notice advising the labor union, employment agency, or workers' representative of Contractor's obligations according to the Contract Documents and RCW 49.60.
4. Contractor shall permit access to its books, records, and accounts, and to its premises by Owner, and by the Washington State Human Rights Commission, for the purpose of investigation to ascertain compliance with this section of the Contract Documents.
5. Contractor shall include the provisions of this section in every Subcontract.

1.07 SAFETY PRECAUTIONS

- A. Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work.
- B. In carrying out its responsibilities according to the Contract Documents, Contractor shall protect the lives and health of employees performing the Work and other persons who may be affected by the Work; prevent damage to materials, supplies, and equipment whether on site or stored off-site; and prevent damage to other property at the site or adjacent thereto. Contractor shall comply with all applicable laws, ordinances, rules, regulations, and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss; shall erect and maintain all necessary safeguards for such safety and protection; and shall notify owners of adjacent property and utilities when prosecution of the Work

may affect them.

- C. Contractor shall maintain an accurate record of exposure data on all incidents relating to the Work resulting in death, traumatic injury, occupational disease, or damage to property, materials, supplies, or equipment. Contractor shall immediately report any such incident to Owner. Owner shall, at all times, have a right of access to all records of exposure.
- D. Contractor shall provide all persons working on the Project site with information and training on hazardous chemicals in their work at the time of their initial assignment, and whenever a new hazard is introduced into their work area.
 - 1. Information. At a minimum, Contractor shall inform persons working on the Project site of:
 - a. The requirements of chapter 296-62 WAC, General Occupational Health Standards;
 - b. Any operations in their work area where hazardous chemicals are present; and
 - c. The location and availability of written hazard communication programs, including the required list(s) of hazardous chemicals and material safety data sheets required by chapter 296-62 WAC.
 - 2. Training. At a minimum, Contractor shall provide training for persons working on the Project site which includes:
 - a. Methods and observations that may be used to detect the presence or release of a hazardous chemical in the work area (such as monitoring conducted by the employer, continuous monitoring devices, visual appearance or odor of hazardous chemicals when being released, etc.);
 - b. The physical and health hazards of the chemicals in the work area;
 - c. The measures such persons can take to protect themselves from these hazards, including specific procedures Contractor, or its Subcontractors, or others have implemented to protect those on the Project site from exposure to hazardous chemicals, such as appropriate work practices, emergency procedures, and personal protective equipment to be used; and
 - d. The details of the hazard communications program developed by Contractor, or its Subcontractors, including an explanation of the labeling system and the material safety data sheet, and how employees can obtain and use the appropriate hazard information.

- E. Contractor's responsibility for hazardous, toxic, or harmful substances shall include the following duties:
 - 1. Contractor shall not keep, use, dispose, transport, generate, or sell on or about the Project site, any substances now or hereafter designated as, or which are subject to regulation as, hazardous, toxic, dangerous, or harmful by any federal, state or local law, regulation, statute or ordinance (hereinafter collectively referred to as "hazardous substances", in violation of any such law, regulation, statute, or ordinance, but in no case shall any such hazardous substance be stored more than 90 days on the Project site.
 - 2. Contractor shall promptly notify Owner of all spills or releases of any hazardous substances which are otherwise required to be reported to any regulatory agency and pay the cost of cleanup. Contractor shall promptly notify Owner of all failures to comply with any federal, state, or local law, regulation, or ordinance; all inspections of the Project site by any regulatory entity concerning the same; all regulatory orders or fines; and all responses or interim cleanup actions taken by or proposed to be taken by any government entity or private party on the Project site.
- F. All Work shall be performed with due regard for the safety of the public. Contractor shall perform the Work so as to cause a minimum of interruption of vehicular traffic or inconvenience to pedestrians. All arrangements to care for such traffic shall be Contractor's responsibilities. All expenses involved in the maintenance of traffic by way of detours shall be borne by Contractor.
- G. In an emergency affecting the safety of life or the Work or of adjoining property, Contractor is permitted to act, at its discretion, to prevent such threatened loss or injury, and Contractor shall so act if so authorized or instructed.
- H. Nothing provided in this section shall be construed as imposing any duty upon Owner or A/E with regard to, or as constituting any express or implied assumption of control or responsibility over, Project site safety, or over any other safety conditions relating to employees or agents of Contractor or any of its Subcontractors, or the public.

1.08 OPERATIONS, MATERIAL HANDLING, AND STORAGE AREAS

- A. Contractor shall confine all operations, including storage of materials, to Owner-approved areas.
- B. Temporary buildings (e.g., storage sheds, shops, offices) and utilities may be provided by Contractor only with the consent of Owner and without expense to Owner. The temporary buildings and utilities shall remain the property of Contractor and shall be removed by Contractor at its expense upon completion of the Work.
- C. Contractor shall use only established roadways or temporary roadways authorized by Owner. When materials are transported in prosecuting the Work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the

vehicle or prescribed by federal, state, or local law or regulation.

- D. Ownership and control of all materials or facility components to be demolished or removed from the Project site by Contractor shall immediately vest in Contractor upon severance of the component from the facility or severance of the material from the Project site. Contractor shall be responsible for compliance with all laws governing the storage and ultimate disposal. Contractor shall provide Owner with a copy of all manifests and receipts evidencing proper disposal when required by Owner or applicable law.
- E. Contractor shall be responsible for the proper care and protection of its materials and equipment delivered to the Project site. Materials and equipment may be stored on the premises subject to approval of Owner. When Contractor uses any portion of the Project site as a shop, Contractor shall be responsible for any repairs, patching, or cleaning arising from such use.
- F. Contractor shall protect and be responsible for any damage or loss to the Work, or to the materials or equipment until the date of Substantial Completion, and shall repair or replace without cost to Owner any damage or loss that may occur, except damages or loss caused by the acts or omissions of Owner. Contractor shall also protect and be responsible for any damage or loss to the Work, or to the materials or equipment, after the date of Substantial Completion, and shall repair or replace without cost to Owner any such damage or loss that might occur, to the extent such damages or loss are caused by the acts or omissions of Contractor, or any Subcontractor.

1.09 PRIOR NOTICE OF EXCAVATION

- A. "Excavation" means an operation in which earth, rock, or other material on or below the ground is moved or otherwise displaced by any means, except the tilling of soil less than 12 inches in depth for agricultural purposes, or road ditch maintenance that does not change the original road grade or ditch flow line. Before commencing any excavation, Contractor shall provide notice of the scheduled commencement of excavation to all owners of underground facilities or utilities, through locator services.

1.10 UNFORESEEN PHYSICAL CONDITIONS

- A. If Contractor encounters conditions at the site which are subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents, or unknown physical conditions of an unusual nature which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, then Contractor shall give written notice to Owner promptly and in no event later than 7 days after the first observance of the conditions. Conditions shall not be disturbed prior to such notice.
- B. If such conditions differ materially and cause a change in Contractor's cost of, or time

required for, performance of any part of the Work, the Contractor may be entitled to an equitable adjustment in the Contract Time or Contract Sum, or both, provided it makes a request therefor as provided in part 7.

1.11 PROTECTION OF EXISTING STRUCTURES, EQUIPMENT, VEGETATION, UTILITIES, AND IMPROVEMENTS

- A. Contractor shall protect from damage all existing structures, equipment, improvements, utilities, and vegetation: at or near the Project site; and on adjacent property of a third party, the locations of which are made known to or should be known by Contractor. Contractor shall repair any damage, including that to the property of a third party, resulting from failure to comply with the requirements of the Contract Documents or failure to exercise reasonable care in performing the Work. If Contractor fails or refuses to repair the damage promptly, Owner may have the necessary work performed and charge the cost to Contractor.
- B. Contractor shall only remove trees when specifically authorized to do so, and shall protect vegetation that will remain in place.

1.12 LAYOUT OF WORK

- A. Contractor shall plan and lay out the Work in advance of operations so as to coordinate all work without delay or revision.
- B. Contractor shall lay out the Work from Owner-established baselines and bench marks indicated on the Drawings, and shall be responsible for all field measurements in connection with the layout. Contractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the Work. Contractor shall be responsible for executing the Work to the lines and grades that may be established. Contractor shall be responsible for maintaining or restoring all stakes and other marks established.

1.13 MATERIAL AND EQUIPMENT

- A. All equipment, material, and articles incorporated into the Work shall be new and of the most suitable grade for the purpose intended, unless otherwise specifically provided in the Contract Documents. References in the Specifications to equipment, material, articles, or patented processes by trade name, make, or catalog number, shall be regarded as establishing a standard quality and shall not be construed as limiting competition. Contractor may, at its option, use any equipment, material, article, or process that, in the judgment of A/E, is equal to that named in the specifications, unless otherwise specifically provided in the Contract Documents.
- B. Contractor shall do all cutting, fitting, or patching that may be required to make its several parts fit together properly, or receive or be received by work of others set forth in, or reasonably implied by, the Contract Documents. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the Work and shall not cut or alter the work of any other contractor unless approved in advance by Owner.

- C. Should any of the Work be found defective, or in any way not in accordance with the Contract Documents, this work, in whatever stage of completion, may be rejected by Owner.

1.14 AVAILABILITY AND USE OF UTILITY SERVICES

- A. Owner shall make all reasonable utilities available to Contractor from existing outlets and supplies, as specified in the Contract Documents. Unless otherwise provided in the Contract Documents, the utility service consumed shall be charged to or paid for by Contractor at prevailing rates charged to Owner or, where the utility is produced by Owner, at reasonable rates determined by Owner. Contractor will carefully conserve any utilities furnished.
- B. Contractor shall, at its expense and in a skillful manner satisfactory to Owner, install and maintain all necessary temporary connections and distribution lines, together with appropriate protective devices, and all meters required to measure the amount of each utility used for the purpose of determining charges. Prior to the date of Final Acceptance, Contractor shall remove all temporary connections, distribution lines, meters, and associated equipment and materials.

1.15 TESTS AND INSPECTION

- A. Contractor shall maintain an adequate testing and inspection program and perform such tests and inspections as are necessary or required to ensure that the Work conforms to the requirements of the Contract Documents. Contractor shall be responsible for inspection and quality surveillance of all its Work and all Work performed by any Subcontractor. Unless otherwise provided, Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. Contractor shall give Owner timely notice of when and where tests and inspections are to be made. Contractor shall maintain complete inspection records and make them available to Owner.
- B. Owner may, at any reasonable time, conduct such inspections and tests as it deems necessary to ensure that the Work is in accordance with the Contract Documents. Owner shall promptly notify Contractor if an inspection or test reveals that the Work is not in accordance with the Contract Documents. Unless the subject items are expressly accepted by Owner, such Owner inspection and tests are for the sole benefit of Owner and do not:
 - 1. Constitute or imply acceptance;
 - 2. Relieve Contractor of responsibility for providing adequate quality control measures;
 - 3. Relieve Contractor of responsibility for risk of loss or damage to the Work, materials, or equipment;

- 4. Relieve Contractor of its responsibility to comply with the requirements of the Contract Documents; or
 - 5. Impair Owner's right to reject defective or nonconforming items, or to avail itself of any other remedy to which it may be entitled.
- C. Neither observations by an inspector retained by Owner, the presence or absence of such inspector on the site, nor inspections, tests, or approvals by others, shall relieve Contractor from any requirement of the Contract Documents, nor is any such inspector authorized to change any term or condition of the Contract Documents.
- D. Contractor shall promptly furnish, without additional charge, all facilities, labor, material and equipment reasonably needed for performing such safe and convenient inspections and tests as may be required by Owner. Owner may charge Contractor any additional cost of inspection or testing when Work is not ready at the time specified by Contractor for inspection or testing, or when prior rejection makes reinspection or retest necessary. Owner shall perform its inspections and tests in a manner that will cause no undue delay in the Work.

1.16 CORRECTION OF NONCONFORMING WORK

- A. If a portion of the Work is covered contrary to the requirements in the Contract Documents, it must, if required in writing by Owner, be uncovered for Owner's observation and be replaced at the Contractor's expense and without change in the Contract Time.
- B. If, at any time prior to Final Completion, Owner desires to examine the Work, or any portion of it, which has been covered, Owner may request to see such Work and it shall be uncovered by Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an adjustment in the Contract Sum for the costs of uncovering and replacement, and, if completion of the Work is thereby delayed, an adjustment in the Contract Time, provided it makes a request therefor as provided in part 7. If such Work is not in accordance with the Contract Documents, the Contractor shall pay the costs of examination and reconstruction.
- C. Contractor shall promptly correct Work found by Owner not to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed, or completed. Contractor shall bear all costs of correcting such nonconforming Work, including additional testing and inspections.
- D. If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or within one year after the date for commencement of any system warranties established under section 6.08, or within the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, Contractor shall correct it promptly after receipt of written notice from Owner to do so. Owner shall give such notice promptly after discovery of the condition. This period of one

year shall be extended, with respect to portions of Work first performed after Substantial Completion, by the period of time between Substantial Completion and the actual performance of the Work. Contractor's duty to correct with respect to Work repaired or replaced shall run for one year from the date of repair or replacement. Obligations under this paragraph shall survive Final Acceptance.

- E. Contractor shall remove from the Project site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by Contractor nor accepted by Owner.
- F. If Contractor fails to correct nonconforming Work within a reasonable time after written notice to do so, Owner may replace, correct, or remove the nonconforming Work and charge the cost thereof to the Contractor.
- G. Contractor shall bear the cost of correcting destroyed or damaged Work, whether completed or partially completed, caused by Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- H. Nothing contained in this section shall be construed to establish a period of limitation with respect to other obligations which Contractor might have according to the Contract Documents. Establishment of the time period of one year as described in paragraph 5.16D relates only to the specific obligation of Contractor to correct the Work, and has no relationship to the time within which the Contractor's obligation to comply with the Contract Documents may be sought to be enforced, including the time within which such proceedings may be commenced.
- I. If Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, Owner may do so instead of requiring its removal and correction, in which case the Contract Sum may be reduced as appropriate and equitable.

1.17 CLEAN UP

- A. Contractor shall at all times keep the Project site, including hauling routes, infrastructures, utilities, and storage areas, free from accumulations of waste materials. Before completing the Work, Contractor shall remove from the premises its rubbish, tools, scaffolding, equipment, and materials. Upon completing the Work, Contractor shall leave the Project site in a clean, neat, and orderly condition satisfactory to Owner. If Contractor fails to clean up as provided herein, and after reasonable notice from Owner, Owner may do so and the cost thereof shall be charged to Contractor.

1.18 ACCESS TO WORK

- A. Contractor shall provide Owner and A/E access to the Work in progress wherever located.

1.19 OTHER CONTRACTS

- A. Owner may undertake or award other contracts for additional work at or near the Project site. Contractor shall reasonably cooperate with the other contractors and with Owner's employees and shall carefully adapt scheduling and perform the Work in accordance with these Contract Documents to reasonably accommodate the other work.

1.20 SUBCONTRACTORS AND SUPPLIERS

- A. The Contractor shall include the language of this paragraph in each of its first tier subcontract, and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. Upon request of the owner, the Contractor shall promptly provide documentation to the Owner demonstrating that the subcontractor meets the subcontractor responsibility criteria below. The requirements of this paragraph apply to all subcontractors regardless of tier. At the time of subcontract execution, the Contractor shall verify that each of its first-tier subcontractors meets the following bidder responsibility criteria:
1. Have a current certificate of registration as a contractor in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
 2. Have a current Washington Unified Business Identifier (UBI) number;
 3. If applicable, have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 4. A Washington Employment Security Department number, as required in Title 50 RCW;
 5. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;
 6. An electrical contractor license, if required by Chapter 19.28 RCW;
 7. An elevator contractor license, if required by Chapter 70.87 RCW.
 8. Not be disqualified from bidding any public works contract under RCW 39.06.010 or 39.12.065(3).
 9. On a project subject to the apprenticeship utilization requirements in RCW 39.04.320, not have been found out of compliance by the Washington state apprenticeship and training council for working apprentices out of ratio, without appropriate supervision, or outside their approved work processes as outlined in their standards of apprenticeship under chapter 49.04 RCW for the one-year period immediately preceding the date of the Owner's first advertisement of the project.

- B. Before submitting the first Application for Payment, Contractor shall furnish in writing to Owner the names, addresses, and telephone numbers of all Subcontractors, as well as suppliers providing materials in excess of \$2,500. Contractor shall utilize Subcontractors and suppliers which are experienced and qualified, and meet the requirements of the Contract Documents, if any. Contractor shall not utilize any Subcontractor or supplier to whom the Owner has a reasonable objection, and shall obtain Owner's written consent before making any substitutions or additions.
- C. All Subcontracts must be in writing. By appropriate written agreement, Contractor shall require each Subcontractor, so far as applicable to the Work to be performed by the Subcontractor, to be bound to Contractor by terms of the Contract Documents, and to assume toward Contractor all the obligations and responsibilities which Contractor assumes toward Owner in accordance with the Contract Documents. Each Subcontract shall preserve and protect the rights of Owner in accordance with the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights. Where appropriate, Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. However, nothing in this paragraph shall be construed to alter the contractual relations between Contractor and its Subcontractors with respect to insurance or bonds.
- D. Contractor shall schedule, supervise, and coordinate the operations of all Subcontractors. No Subcontracting of any of the Work shall relieve Contractor from its responsibility for the performance of the Work in accordance with the Contract Documents or any other obligations of the Contract Documents.
- E. Each subcontract agreement for a portion of the Work is hereby assigned by Contractor to Owner provided that:
 - 1. The assignment is effective only after termination by Owner for cause pursuant to section 9.01 and only for those Subcontracts which Owner accepts by notifying the Subcontractor in writing; and
 - 2. After the assignment is effective, Owner will assume all future duties and obligations toward the Subcontractor which Contractor assumed in the Subcontract.
 - 3. The assignment is subject to the prior rights of the surety, if any, obligated under any bond provided in accordance with the Contract Documents.

1.21 WARRANTY OF CONSTRUCTION

- A. In addition to any special warranties provided elsewhere in the Contract Documents, Contractor warrants that all Work conforms to the requirements of the Contract Documents and is free of any defect in equipment, material, or design furnished, or workmanship performed, by Contractor.
- B. With respect to all warranties, express or implied, for Work performed or materials

furnished according to the Contract Documents, Contractor shall:

1. Obtain all warranties that would be given in normal commercial practice;
2. Require all warranties to be executed, in writing, for the benefit of Owner;
3. Enforce all warranties for the benefit of Owner, if directed by Owner; and
4. Be responsible to enforce any subcontractor's, manufacturer's, or supplier's warranty should they extend beyond the period specified in the Contract Documents.

C. The obligations under this section shall survive Final Acceptance.

1.22 INDEMNIFICATION

- A. Contractor shall defend, indemnify, and hold Owner and A/E harmless from and against all claims, demands, losses, damages, or costs, including but not limited to damages arising out of bodily injury or death to persons and damage to property, caused by or resulting from:
1. The sole negligence of Contractor or any of its Subcontractors;
 2. The concurrent negligence of Contractor, or any Subcontractor, but only to the extent of the negligence of Contractor or such Subcontractor; and
 3. The use of any design, process, or equipment which constitutes an infringement of any United States patent presently issued, or violates any other proprietary interest, including copyright, trademark, and trade secret.
- B. In any action against Owner and any other entity indemnified in accordance with this section, by any employee of Contractor, its Subcontractors, Sub-subcontractors, agents, or anyone directly or indirectly employed by any of them, the indemnification obligation of this section shall not be limited by a limit on the amount or type of damages, compensation, or benefits payable by or for Contractor or any Subcontractor under RCW Title 51, the Industrial Insurance Act, or any other employee benefit acts. In addition, Contractor waives immunity as to Owner and A/E only, in accordance with RCW Title 51.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION

SECTION
SCOPE OF WORK

PART 1 - GENERAL

1.01 It is the responsibility of the contractor to furnish all materials, equipment, and prevailing wage labor required to complete all work in accordance with specifications and site plans as follows:

- A. Demolition. (see plan attached). Decommission and remove any of the existing septic system per the Charles H. Pollmar & Associates design and according to code and Kitsap County Health Department requirements.
- B. New Construction. (see plan attached). Install completely new system per Charles H. Pollmar & Associates design plans and specifications (see attached) . The exact location of the tanks, associated piping, and power will be deviated from the drawings and must be field verified with the District Project Manager and septic designer before the project can begin.
- C. An important note: the access road to the site is narrow and can be congested. Please ensure your equipment can make it to the job site.
- D. The contractor shall be a company with demonstrated successful experience installing similar projects and products and having at least five (5) years of experience.
- E. Any material haul-off is to be included in the bid and the responsibility of the contractor.
- F. Site restoration and cleanup are the responsibility of the contractor.

1.02 Materials

All materials will be per the Charles H. Pollmar & Associates design specifications with no variations unless approved by the District Project Manager and Charles H. Pollmar & Associates.

END OF SECTION

BUILDING SITE APPLICATION

FOR WATER SUPPLY & ONSITE SEWAGE SYSTEM

Submittal Date	Memo Number	Review Fee	S.S.I.

BUILDING SITE INFORMATION

Building Site Address – Street, City, Zip Code:

11299 Arrow Point Drive NE / Bainbridge Island, Washington 98110

Assessor Tax Account Number:

172502-2-044-2000 [BATTLE POINT PARK]

Property Size:

3,839,814

Lot Number:

APPLICANT INFORMATION

First & Last Name

Bainbridge Island Metropolitan Parks & Recreation

Phone Number:

(206) 351-4659

E-Mail:

dharry@biparks.org

Mailing Address – Street, City, State, Zip Code:

P.O. Box 10010 / Bainbridge Island, Washington 98110

APPLICATION GENERAL PROPOSAL

Application Type:

- ☐ New
☐ Repair (no building permit needed)
☐ Modification (building permit needed)
☐ Building Clearance with Compliance

Application Use Type:

- ☐ Residential
☐ Multi-Family
☐ Community
☒ Commercial

Application Water Type:

- ☒ Public Water
☐ Private Water (residential only)

☒ This is a Redesign (describe what is being changed) OR a Building Clearance with Compliance (describe proposal)

Installation of 1 Additional 1500 Gallon Pump Tank to increase capacity to 4,500 Gallons Total.

APPLICANT/AGENT & DESIGNER ACKNOWLEDGEMENT

I certify that (1) the information contained in this application is true and accurate to the best of my knowledge; (2) the application represents my intended use of this property; and (3) any related building permits for which I apply for will be consistent with the plans and specifications contained in this application.

I acknowledge and understand that I, along with my contractors, are responsible for adhering to the conditions of approval of this application and are responsible for conforming to applicable Kitsap County Board of Health ordinances and Washington State Department of Health regulations for onsite sewage systems and water supply.

I acknowledge and understand that the design, location, and construction of my onsite sewage system and/or well is/are critical and of a sensitive nature, and I agree to protect these areas as required by the regulations.

I understand that once this application is submitted and/or approved, any changes to, or variations from, the information or conditions related to this plan may require a revised application submittal and/or could result in the revocation, denial, or suspension of this application or a related building permit and that this application will fully expire within 3 (three) years and 30 (thirty) days from the original date of application submittal.

I understand that I have the right to appeal the Health Officer's decision concerning this application pursuant to the regulations, and that approval of this application does not guarantee that a building permit will be issued.

Designer/Engineer Stamp



Designer/Engineer Contact Phone Number:

(206) 842-7927

Designer/Engineer E-Mail Address:

chpollmar69@comcast.net

Applicant/Agent Signature

Charles H. Pollmar

Date

11/01/2024

Intake Notes – Health District Use Only

DRINKING WATER & ONSITE SEWAGE SYSTEM SPECIFICATION SHEET

Assessor Tax Account Number:
172502-2-044-2000 [BATTLE POINT PARK]

A. DRINKING WATER SUPPLY INFORMATION

<input type="checkbox"/> Proposed <input checked="" type="checkbox"/> Existing	<input checked="" type="checkbox"/> Public	System Name Battle Point Park Water System	System ID D47258
	<input type="checkbox"/> Private <input type="checkbox"/> Individual <input type="checkbox"/> 2-Party	ASSESSOR TAX ACCOUNT NUMBERS FOR PROPERTIES SERVED BY WELL Water Connection 1 (Parcel with Well) Water Connection 2 (Parcel connected to Well)	

B. SOIL EVALUATION PROFILES

Soil Evaluation Date 05/28/2024	SOIL LOG NUMBERS MUST CORRELATE WITH SITE PLAN – INDICATE TOTAL EXCAVATED DEPTH, SOIL TYPES, WATER TABLE LEVEL & DEPTH OF RESTRICTIVE LAYER			
SOIL LOG #1	SOIL LOG #2	SOIL LOG #3	SOIL LOG #4	
<i>Downslope Side Measurements</i> 0-30" COMPACTED, Tan, Sandy Loam FILL (Non-Native) 30-36" Dark Brown, Semi-Compact Topsoil 36-52" Semi-Loose, Light Brown to Tan, Fine Grain, Sandy Loam w/Some Silts 52-58" Semi-loose to Compact, Very Fine Grain, Sandy Loam With Mottling Root Penetration to 48: Level Type 4 & 5 Soils	<i>Downslope Side Measurements</i> 0-34" COMPACTED, Fill & Topsoil 34-36" COMPACTED, Sandy Loam 36-50" Light Brown, Fine Grain, Sandy Loam w/Some Silts 50-54"+ SAME, But Mottled Root Penetration to 43" Level Type 4 & 5 Soils * [3 Compartment Tank: 1500 Gallon Single Compartment Tank In - Series w/1500 Gallon, 2 Compartment Tank] ** [3 - 1500 Gallon Pump Tanks Connected @ Top & BOTTOM]	<i>Downslope Side Measurements</i> SOIL LOG # 1 (Circa 1988) Mound 0-7" COMPACTED, Recent 1970's Silty, Sandy Loam FILL 7-18" Topsoil & Old, Sandy Loam Fill 18-23" Native Sandy Topsoil 23-36" Fairly Loose, Brown, Sandy/Gravelly Loam & Loam 36-43" Loose, Gray, Heavily Mottled Sandy, SILT LOAM @ 43" COMPACTED, Fine Sands & Silts (GLACIAL TILL)	<i>Downslope Side Measurements</i> SOIL LOG # 2 Circa 1988 (Mound) 0-12" Recent Topsoil & Compact Sandy Loam 12-17" Compacted, Silty, Sandy Loam FILL 17-20: Native Topsoil 20-36" Fairly Loose, Brown to Light Brown, Silty Sandy Loam & Loam - Very loose & Mottled Below 28" Level 36-38" Heavily Mottled, SILT LOAM 38-44"+ Semi-Compact, Gray CLAY	

C. DAILY FLOW – TANKAGE – TREATMENT

DESIGNED MAX SEWAGE FLOW	TRASH/SEPTIC/PUMP TANKS	ADVANCED TREATMENT INFORMATION
576 Gallons Per Day	Type <input type="checkbox"/> Trash Tank <input checked="" type="checkbox"/> Septic Tank <input checked="" type="checkbox"/> Pump Tank <input type="checkbox"/> Other	<input type="checkbox"/> Proprietary Advanced Treatment Manufacturer: *** [Depth of Native Soil Interface] Model: <input checked="" type="checkbox"/> Non-Proprietary Advanced Treatment Device Type: BOTTOMLESS SAND FILTER
PROPOSED RESIDENTIAL BEDROOMS	Size (gal)	
NA Maximum Bedrooms	QTY	
PROPOSED TREATMENT LEVEL		
TL "B"		

D. DISPERSAL COMPONENT CONSTRUCTION

DISPERSAL COMPONENT SIZING Hydraulic Loading Rate of Dispersal Area: <u>.40 gals./ft./Day</u> Minimum Dispersal Area (Sq. Ft.) In Primary: <u>1440</u> Minimum Linear Feet or Dimensions: <u>3 - 10' x 48'</u> DISTRIBUTION METHOD <input type="checkbox"/> Gravity Distribution <input checked="" type="checkbox"/> Pressure Distribution <input type="checkbox"/> Drip Irrigation <input checked="" type="checkbox"/> Other: <u>6 Zone INDEXING VALVE</u>		TRENCH CONSTRUCTION PROFILE A. Percent Slope in Primary: <u>0-3</u> % B. Maximum Trench Depth: <u>24 & 36</u> inches (Downslope Side Measurements) C. Vertical Separation: <u>12-16"</u> inches D. Trench Width: <u>10 Feet</u> inches E. Additional Cover Required: <u>12</u> inches
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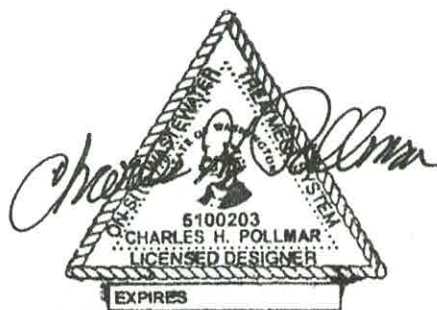
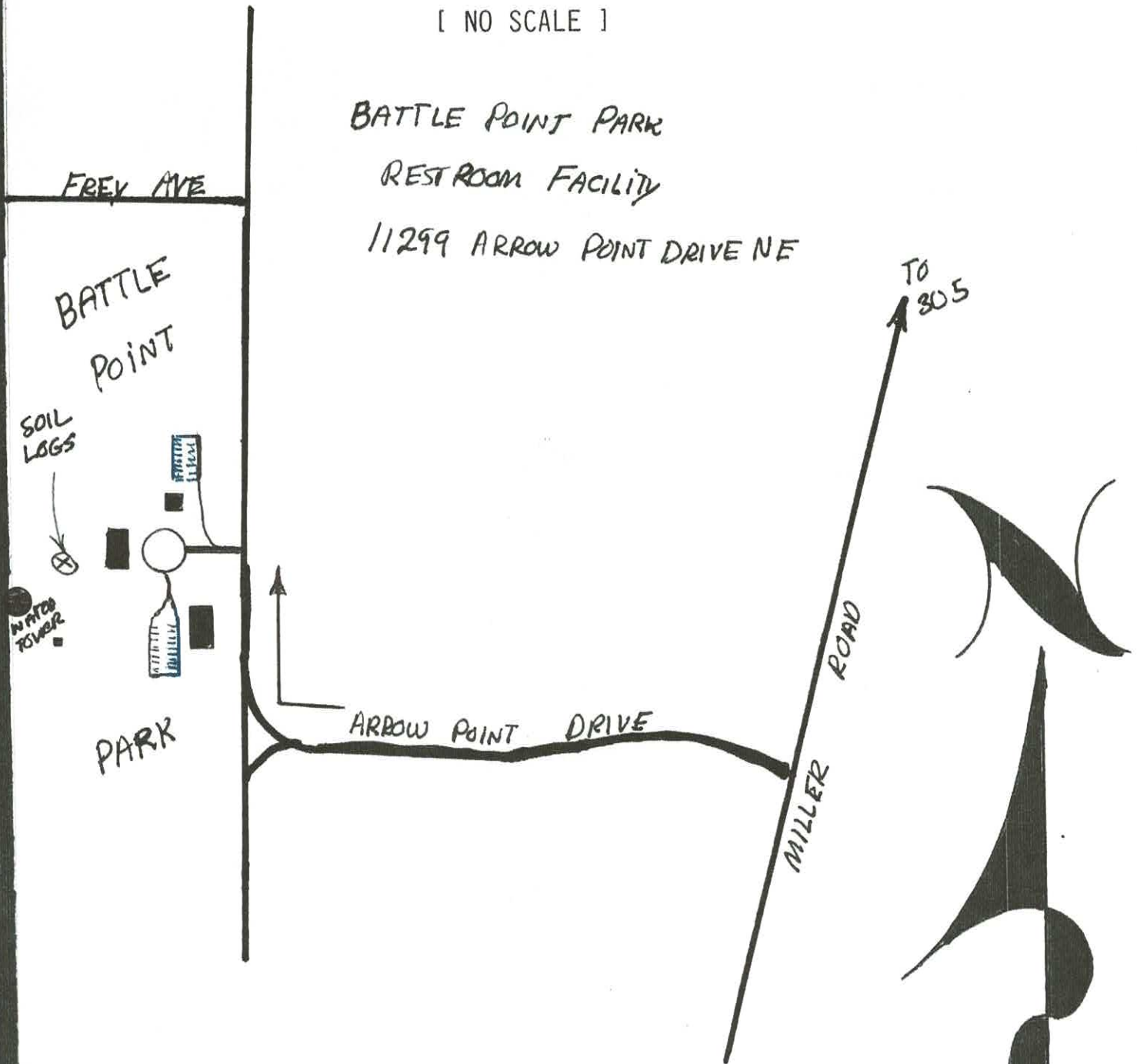
VICINITY MAP

[NO SCALE]

BATTLE POINT PARK

RESTROOM FACILITY

11299 ARROW POINT DRIVE NE



CHARLES H. POLLMAR & ASSOCIATES

BATTLE POINT PARK – RESTROOM FACILITY

EXPLANATORY NOTES:

The Purpose of this Application is to replace the Existing Restroom Facility with a New Building and to replace the Existing Disposal Component (i.e. Drain Field), which is functioning marginally at best.

Some History of the site is necessary to understand the nature of the water use at the Park and the soil conditions that predominate in this area and over a good portion of the 90 Acre Park. Originally this site was the Battle Point Naval Radio Station and was the communications link between the Mainland and our forces in the Pacific. Much of the Native Soils were disturbed (Bulldozed, Compacted, Excavated, etc.) when the Station was under construction. After the Navy declared it as "surplus property", Bainbridge Island acquired it as a Park in 1972. After the Communication Towers were dismantled, an Engineering Battalion from Fort Lewis used their Earthmoving Equipment to "shape" the Park into its current form (more or less) as a training exercise. While this may have saved a considerable amount of money for the Parks Department, it didn't improve the conditions and Drainage capability of the Native Soils. Some soils were buried deep under Fill and Overburden and much of the area was compacted to a point synonymous with Glacial Till (Hardpan). Finding Undisturbed Structured Soils that are capable of absorbing, dissipating, and treating effluent from an On-Site Sewage Disposal System has always been a challenge @ Battle Point Park.

That said, the Existing Restroom facility was constructed in 1988 and connected to a Pressure Distribution Mound System designed for a Sewage Flow of 390 Gallons per Day. It was, however, designed and installed PRIOR to the use of Time Dosage and Control Panels that could limit the Daily Flow to the volume for which the system was designed. In addition, the Standard Pump tank at that time was extremely small and not large enough for time dosage. In short there was ample opportunity, with increased use, for saturation of the Gravel Bed in the mound, excessive anaerobic bacterial growth – referred to as "Biomat", and many other factors that led to the premature failure of this system. With the relatively recent addition of the "Play Park" adjacent to the Existing Restroom, the Daily Sewage Volume has risen considerably. Increased Volume is also associated with the increasing popularity of the Park as well as occasional Special Events attended by more people than normal. In summation, the Existing Septic System is not adequate to handle the increased volume and there is no capability for effluent storage – where excess volume generated @ special events can be stored and then distributed evenly during the week when Daily Sewage Volumes are less.

The Proposed Replacement Septic System has increased Tankage (as required by code) for Sewage Volume (3 Times the anticipated Daily Flow), as well as increased Pump Tank Capacity (MINIMUM 2 times the anticipated Daily Flow). The Capacity of the Pump Tank has been increased beyond the minimum, specifically to allow for "surge" volumes associated with Special Events w/large numbers of attendees. The Septic Tank arrangement provides for a 3 Compartment Septic Tank (3,000 Gallons Total), with the 1st Compartment consisting of a Single Compartment, 1500 Gallon Tank, in Series with a 1500 Gallon, 2 Compartment Septic Tank that provides the 2nd and 3rd Compartments. The Pump Tank Volume is 3,000 Gallons – at a MINIMUM – which consists of 2 – 1500 Gallon Tanks that are connected at the Bottom as well as the top. It is **RECOMMENDED** that a 3rd 1500 Gallon Tank be added to maximize "overflow" capacity to 4,500 Gallons, which would assure that NO special events would ever overwhelm the system. This tank, if installed, would also be connected at the Bottom (& Top) in series with the 2nd Tank.

In order for effluent to migrate and dissipate in the surrounding soil, it is necessary for the effluent to penetrate below the Existing Compacted Surface Soils, which, in the vicinity of Soil log #'s 1 and 2 was

Approximately 3 Feet Deep. In the Area of the existing Pressure Distribution Mound, only the Upper 12" of Compacted Topsoil was removed. Judging from the analysis of the Original (1988) Soil Logs, in retrospect, it would have been better to have excavated it to a depth of 24" rather than 12". Although the Subsoils are looser and more permeable than the Compacted Topsoils, the underlying soils are dense and extremely fine Grained, and although they could be considered as a Type 4 Soil, drainage characteristics are probably more like a Type 5 soil, even though it is NOT a Silt Loam. Since the Basal Area for the Original Mound System was based on a Type 5 Soil (with a Loading Rate of .45 gals./sq.ft./Day), it is appropriate for the Proposed Disposal Component to be designed for a Type 5 Soil, as well. Since the Original Design was submitted, however, the State Department of Health changed the Loading (Application) Rate for Type 5 soils from .45 GPD/sq.ft. to .40 Gallons/Day/sq.ft. This, in turn, increases the Basal Area required for the absorption of effluent.

The difficulty in the installation of the disposal component at the level where absorption & Drainage is possible, is that it would be so deep in the soil that oxygen - necessary for aerobic bacterial action- would be scarce and the system would quickly become anaerobic and fail. The solution for this problem is to install a "Bottomless" Sand Filter. In a Bottomless Sand Filter, 24" of Sand is installed beneath the Gravel Bed; penetrating down to the more permeable subsoil, and the Gravel bed, where the effluent is dispersed, is within 12" of the ground surface, where a bountiful supply of oxygen is available. Another advantage is that the effluent will be treated by the underlying sand, and, in essence, be purified by the time it reaches the basal area where absorption takes place. As the BOD5 (Wastewater Strength) of effluent that has been Pre-Treated in a Sand Filter is so low, usually less than 2 mg./Liter, the effluent can no longer form a Biomat - there are simply no Nutrients for the bacteria to digest. As the Application (Loading) Rate is based on the eventual formation of a Biomat, the absorption of the effluent at the Interface is enhanced.

The Basis for the Projected Daily Sewage Volume for the Restroom Facility is on a separate page accompanying this Application. As in the case for many situations, the average "Daily" Sewage Volume and use of facilities is much less than the Sewage Volume generated during "Special Occasions or Events" where the number of attendees is much greater. The Basis for Handling these larger Sewage Volumes that exceed the Average Daily Volumes is fairly straight forward: This involves Estimating or computing Sewage Volumes on a Weekly rather than Daily basis. By the addition of at least 1 "Special Event" in the "Weekly Sewage Volume" and dividing that figure by 7 Days in a week, the Volume of effluent dispersed each Day is GREATER than an "Average" Days flow during the week. As such, the excess volume generated by "Special Events" is dispersed equally over the course of the week. An example of this would be as follows: Assuming an "Average" Daily Sewage Volume of 300 GPD during the week and 1 "Special Event" that added 1000 Gallons to the Sewage Volume that week. The Total "Average" Daily Volume for 7 Days would be 2100 Gallons, and, when the "Special Event" is added, the Weekly Total becomes 3,100 Gallons. When divided by 7 Days in a full week, the "Average" Daily Volume is 443 Gallons per Day. As such, with additional effluent storage capacity in the Pump Tank, the excess volume generated by "Special Events" can be metered out during the week, when water use is less. In this case, if the Dosage Volume is set for 443 Gallons per Day, the excess volume (1000 Gallons) is dispersed at the volume of 143 Gallons per Day over the course of the week (7 Days), while maintaining the Daily Flow for which the system was designed. In this manner, Daily Applications of effluent are maintained and do not exceed the volume for which the system was designed. This technique has been used for many institutions, including Churches, which, for the most part, have one high volume event per week.

To be able to efficiently and effectively disperse the effluent EQUALLY over the 1,440 sq.ft of Absorption Area required, the Bottomless Sand Filter has been divided into 3 EQUAL size components of 480 sq.ft. Each component is rectangular with a maximum width of 10 Feet and a length of 48 Feet. 2 of these Disposal Components are located in unused ground West of the Transmission Building, and the other is located within the area of the Previous Pressure Distribution Mound System. The 2 Bottomless Sand Filters

adjacent to each other are to be excavated to a depth of 36" – to penetrate below the Compacted Soil @ the surface. The one within the Bounds of the Old Mound is to be excavated down to a depth of 12" BELOW the Original Basal Area of the Mound. As only the Top 12" of soil was removed when the Mound was constructed, this increases the Depth from the Original Ground Surface to the Basal Area of this Bottomless Sand Filter to 24", or 6" less than the other 2 Components. This will expose undisturbed native soil for the absorption of effluent @ the bottom of this Disposal Component. Overview and Cross-Sectional Views for EACH of the Disposal Components that show the depths and manner of construction accompany this Application. Excavated Soil may be used to "berm" around the edges of these excavations and to "Blend" the elevation of the components into the surrounding terrain. Preparation of the Basal Area of these components PRIOR to the Installation of the Sand is critical to their function, and must be supervised (& Certified) by this Designer. To Distribute the effluent Equally between ALL the Disposal Components and to prevent saturated flow conditions, the Pressure Distribution Laterals in each Disposal Component (3 Total) are to be divided into 2 Zones (6 Zones Total), which are to be dosed Independently & Sequentially via a 6 Zone Indexing Valve. The Indexing Valve is to be set-up so that only 1 Zone in each Disposal Component is dosed at a time and NEVER in sequence with the other Zone in the SAME component. In other words, the System will dose a Separate Component in each Disposal Component BEFORE it doses the 2nd zone in each component. It will dose the 1st Zone in the 1st Component, then the 1st Zone in the 2nd Component, then the 1st zone in the 3rd Component. On the 4th cycle, the 2nd Zone in the 1st Component will be dosed, and so on. In this manner, every time the pump comes on a zone in a separate component will be dosed.

In regard to the Tanks, 1500 Gallon, Concrete tanks are specified. ALL tank excavations are to be "Bedded" & leveled w/Gravel prior to Tank Installation. Under NO Circumstances is Sand to be used to "Bed" or Level the Tanks. The Tanks are to be Backfilled w/7/8" Washed Gravel up to the level of the piping at a minimum, so that the interconnected piping has solid support and cannot settle. The 2nd Septic Tank is to be slightly Lower than the 1st Septic Tank to insure flow between the compartments at the proper level. The Pump Tank(s) are to be 2-3' + lower than the 2nd Septic Tank but the Pump Tanks are to be installed level and connected with a 6 or 8" Pipe at the Bottom, and a 4" Pipe at the Top. Inlet and Outlet Baffles are REQUIRED in ALL Tanks. While a 3rd, 1500 Gallon Pump Tank is **Strongly Recommended**, 2 - 1500 Gallon Pump Tanks are REQUIRED AT A MINIMUM. In either case, the Pump and Pump Vault (or Flow Inducer) is to be installed at the far end of the Last Tank in series. Because of the Level of the Pump Intake, about 1/3 of the Tank Volume is lost as far as storage capacity is concerned; a 1500 Gallon Tank has approximately 1000 Gallons of Storage Capacity; hence the Recommendation for 3 Pump Tanks instead of 2 Tanks. **3 Tanks would yield a full 3000 Gallons Storage capacity versus 2000 Gallons for 2 Pump Tanks.** This is especially important when compensating for uncertain Volumes in relation to "Special Events".

Construction Oversight by this Designer is critical to insure the proper Preparation for and Installation of this Septic System. This Designer must be notified by the Installer prior to Installation of any portion of the System. Tank location may vary at the discretion of the Designer, Installer and Parks Department personnel, provided that they meet all Required Setbacks. Tanks may be installed at any time, but the Disposal Components must be installed during DRY Weather, when the soil is DRY – preferably during the Summer or Early Fall months. The use of the Existing Mound System must be DISCONTINUED at least 1 to 2 weeks before the Installation of the Disposal Component in the Existing Mound Footprint – to allow the effluent to dissipate and the soils to dry out. The Buried Utilities in the vicinity of the Septic System Components must be located and verified PRIOR to the Installation of ANY Component of the Septic System.

CHARLES H. POLLMAR & ASSOCIATES

BATTLE POINT PARK – RESTROOM FACILITY

SEWAGE VOLUME ESTIMATES:

PRIMARY SOURCE: EPA Design Manual

Table 4-6: Typical Wastewater Flows from Commercial Sources

Table 4-8: Typical Wastewater Flows from Recreational Sources

PROJECT: New RESTROOM FACILITY vicinity of "PLAY PARK"

Wastewater Volume per Person is PROJECTED to be 2.6 Gallons/Person/Day. This is the Typical for a variety of Functions that represent functions similar to activities at Battle Point Park. A theater, for example has a projected volume of 2.6 Gallons/Seat. Assuming that the theater is not showing a double feature, that covers a time frame of about 3 Hours. 2.6 Gallons per person is also "Typical Use" for a "Store Resort" per Customer, as well as for a Restaurant per meal served. This projected volume was also used for the failing Mound System when it was proposed in 1988. Failure of the Mound, however, was not due to the projected usage per individual, but largely because of INCREASED Sewage Volume resulting from greater usage, as there was no way to restrict Daily Sewage Volume to the Designed Capacity of the Mound.

PROJECTED DAILY VOLUME @ 2.6 Gallons/Person:

NORMAL USAGE: 150 People per Day; 150 Persons x 2.6 Gallons/Day = 390 Gallons/Day

SPECIAL EVENTS: 400 People / Event; 400 Persons x 2.6 Gallons/Day = 1040 Gallons/Day

PROJECTED DESIGN VOLUME(S):

With 1 Weekend Event per Week	=	1,040 Gallons	<u>3,380 Gallons/Week</u>	
6 Normal Days @ 390 GPD	=	<u>2,340 Gallons</u>	7 Days	= 482.86 GPD
		3,380 Gallons/Week		
With 2 Weekend Events per Week	=	2,080 Gallons/Week		
5 Normal Days @ 390 GPD	=	<u>1,950 Gallons/Week</u>		
		4,030 Gallons/Week		
		7 Days		= 575.71 Gallons/Day AVERAGE

ABSORPTION (Basal Area) AREA REQUIRED:

Projected DAILY VOLUME = 576 Gallons 576 Gallons/Day
40 GPD/sq.ft. (Loading Rate) = 1440.00 sq.ft = 480 sq.ft per
3 Components Component

PROPOSED DISPOSAL COMPONENT: 3 – 480 sq.ft. BOTTOMLESS SAND FILTERS

NOTE:

For Purposes of these computations, the higher Sewage Volumes generated by "Special Events" include the Daily Sewage Volume for "Normal Usage", as the "Events" would, to a great extent, Displace Normal Usage during those days. 2 Events per week adds a measure of safety to the Projected Daily Sewage Volume

CHARLES H. POLLMAR & ASSOCIATES

INTRODUCTORY NOTES:

The Purpose of the following Notes are to insure that the Drain Field Area is carefully cleared and Prepared for Drain Field installation & to insure that the Disposal Component (i.e. Drain Field) is properly installed in the native soil. Optimum Performance of the system can only be insured by Preserving the Soil Structure and Porosity inherent to the site. Although each site and situation is different, the Principles and Procedures outlined below will apply to MOST situations. Additional notes, instructions, and comments particular to a specific site will be in the "EXPLANATORY NOTES" accompanying the application. Waivers attached to the Building Site Application (BSA) may, if accepted, modify the required setbacks specified in these instructions.

Where waivers are applicable, they will modify site requirements in accordance with the waiver requested.

SPECIFIC INSTALLATION INSTRUCTIONS:

- 1.) In general, the SHALLOWER the percable soil depth, the more carefully the Drain Field Area must be cleared. Excessive Bulldozing, especially during wet weather, can lessen the Percable Soil Depth & the porosity through compaction and destruction of the soil structure.
 - A.) When Trench Depth is only 12" (or less), it is strongly recommended that the Drain Field Area be cleared of brush, small trees, and debris, BY HAND, or by an excavator with a "Thumb" attachment ONLY during DRY Weather, when the soil is dry.
 - B.) Trenches with Installation Depth of 18" or greater are less susceptible, but still can be damaged during the clearing process, especially if clearing takes place when the soil is wet or during wet weather.
 - C.) In preparation for building, the economy of clearing the entire Building Site at one time is obvious. If clearing is to be done during the Winter months or during wet weather, however, it would be best to postpone the actual clearing of the Drain Field Area until dry weather, when the soil is dry.
 - D.) UNDER NO CIRCUMSTANCES are burn piles to be placed on any portion of the Drain Field Area. Burn Piles can destroy the soil structure to a depth of 4-5 Feet through heat alone. Ash introduces clay or silt size particles into the soil, and the compaction by heavy machinery also destroys the porosity of the soil.
- 2.) Trenches (or Drip lines) are to be installed parallel to the contour of the slope, so as to maintain a uniform depth in the Native Soil. Where there is sufficient depth of Percable soil, strict adherence to the contours is not as critical, and trenches can be deeper at one end or the other, provided that the minimum vertical separation required is maintained.
- 3.) The Trenches may be installed with as little as 2 Feet of undisturbed soil between trenches (5 foot Centers for 36" wide Trenches). Greater separation is permissible, desirable, and necessary where slopes vary and Contours are uneven.
- 4.) STANDARD TRENCHES (w/4" Pipe) or PRESSURE DOSED TRENCHES are to be installed in accordance with the Cross-Sectional Views and Specifications provided.

5.) METHODS OF DISTRIBUTION:

A.) STANDARD DISTRIBUTION with a Distribution Box ("D-Box"):

- 1.) Drain Line Segments must be EQUAL in length.
- 2.) The Drain Lines are to be installed LEVEL.
- 3.) Under NO Circumstances is Standard Distribution to be intermixed with Serial Distribution.

B.) SERIAL DISTRIBUTION w/connections made via Stepdowns or Drop-Boxes:

- 1.) Trench Lengths MAY vary, but must total the lineal feet required.
- 2.) Trenches must be installed absolutely level w/each trench In-Series with the preceding and successive trenches.
- 3.) The Stepdowns must be constructed in accordance with the Cross-Sectional View.
- 4.) As Serial Distribution Systems develop a severe biomat in the uppermost trench over time, it is recommended that a "D-Box" be installed at the head of the Drain Field whereby the upper trench can be shut-off and allowed to dry out from time to time and the effluent shunted to the 2nd or 3rd trench in series. This "D-Box" should be installed in a Riser so that it is accessible from the surface for maintenance.

C.) PRESSURE DISTRIBUTION:

- 1.) Trenches are to use 7/8" Washed Gravel instead of the Standard Drain Rock.
- 2.) Use of a Hydro-Splitter Valve Assembly at the head of the system is REQUIRED To insure equal Distribution, as it allows adjustment of the Head Pressure of each trench from a single location.
- 3.) Lateral Length may vary, provided the number of orifices are proportional to the Length of each trench and that the Head Pressure of ALL Trenches is EQUAL.
- 4.) Either 9" Gravel depth or 12" Gravel Depth Trenches MAY be installed.
- 5.) Where the Hydro-Splitter is preceded by a Mechanical Ratcheting Valve, Trench Lengths must be EQUAL. Head Pressure adjustment in trenches where a Ratcheting valve is used is much simpler and more precise than can be achieved with a Hydro-Splitter alone. Ratcheting Valves must be installed at a higher elevation than the trenches and enclosed in a PVC Riser for access & maintenance purposes.
- 6.) As pressure Distribution Systems are susceptible to Orifice clogging from suspended Solids in the effluent, the FOLLOWING is required to minimize the risk:
 - a.) An effluent screen is to be installed in the Outlet Baffle of the Septic Tank.
 - b.) A MINIMUM 1150 Gallon Pump Tank (or larger) is required for up to a 4 Bedroom Capacity Residence. A 1500 Gallon Pump Tank is recommended for a 4 Bedroom Capacity residence.
 - c.) The effluent pump is to be installed in a 5 Foot (high) PVC Pump Vault within the Pump Tank. This vault is to have 2 Inch holes drilled 18" ABOVE the bottom of the vault and is not to have an internal "basket Screen". The Floats are to be set so that the effluent NEVER drops to the level of the holes.
 - d.) NO Pump Vault is required for Filtrate Pump Tanks following a Sand Filter.
- 7.) As is the case w/Gravity Trenches, the Gravel is to be covered w/Filter Fabric prior to Backfilling.
- 8.) Monitor Ports to check on "Ponding" of effluent in the trenches are to be installed

in each trench and enclosed in 10" Valve Boxes for access. Lateral Ends are also to be enclosed in 10" Valve Boxes to allow for periodic maintenance.

- 9.) ALL End Orifices are to be at the 12:00 Position (UPWARD) w/Orifice shields. ALL Other Orifices are to be at 6:00 Position (DOWNWARD) and do not require Orifice Shields.
- 10.) ALL Pressure Distribution Systems require a Control Panel for Time Dosage. An Orenco "MVP" Control Panel is specified whether for Sand Filter Pre-Treatment, Pressure Distribution Drain Field or Pressure Distribution Mound or ANY Combination thereof.
- 11.) Although no longer required by the Health Department, this Designer requires 3 Float Switches in the Pump Tank: a High Water Alarm Float, and Operational Float (On/Off), and a Redundant OFF Float. In the event of failure of the "Operational" Float, the Redundant Off float will shut the system down and prevent the pump from running dry and burning up.

D.) DRIP IRRIGATION DISPOSAL SYSTEMS:

- 1.) Drip Irrigation Disposal effluent MUST be Pre-Treated preferably through a Sand Filter or, at a minimum, by an Aerobic Pre-Treatment Unit PRIOR to its disposal.
- 2.) Drip Line Piping must be Pressure Compensating so that emitter discharge is not affected by elevation differences.
- 3.) Drip Lines and emitters must be spaced in accordance with the distances specified in the Design and in accordance with Kitsap County Drip Irrigation Guidelines.
- 4.) In general, the Drip Lines are to be installed parallel to the Existing Ground contours.
- 5.) Unless specified to the contrary in the Design, Drip Line Depth is to be 6" in the Native Soil.
- 6.) An Orenco "Biotube" Pump Vault and Filter is specified in the Pump Tank – NO SUBSTITUTES !
- 7.) An Orenco MVP Control Panel or an "MVP Style" Nuwater Control Panel is Specified (where a NuWater ATU is specified) – NO SUBSTITUTES !
- 8.) Where an Aerobic Pre-Treatment Unit (or Sand Filter) is used, the Return Piping from the Drip Field is to be routed back to the Pump Tank and not to any other tank or component.
- 9.) A Flow Meter is to be installed on BOTH the Supply & Return piping.

E.) MOUND & BOTTOMLESS SAND FILTER SYSTEMS:

- 1.) BOTH the Basal Area of a Mound Systems & the Basal Area of a Bottomless Sand Filter must be prepared the same way. Instructions for Preparations accompany the Applications proposing these type of systems. Without Proper Preparation, the Native Soil essentially acts like Hardpan and the effluent either runs off of it & bleeds out at the "toe" of the Mound or build's up in the Sand Filter causing saturated conditions & increased Biomat formation.
- 2.) The Grade of Sand is also extremely important. The sand must be a Coarse Grain With an extremely LOW Silts & Fines content. C-33 Sand (concrete Sand) is NOT acceptable, as it allows too large an amount of Silts & fines. Generally Sand that has been graded and described as Sand Filter Sand is appropriate. Final checking with the Designer is required, however.
- 3.) DRY Weather Installation is also critical – when the soil is in a DRY State.

F.) GENERAL REQUIREMENTS:

- 1.) If Cover Material is to be installed over the top of the Drain Field Area, it is to be Installed to the depth specified on the Cross-Sectional View. The Cover Material is to consist of a Coarse Sandy Soil to promote Aerobic Bacterial Action. Topsoil, for vegetative growth, may be added on top of the Cover Material if desired.
- 2.) Where a Curtain Drain is required, installation is to be in accordance with the location indicated on the design and the Cross-Sectional View provided. The Designer must insure that that the curtain drain is at the proper depth through On-Site inspection during installation.
- 3.) ALL Downspout & Footing Drains must be diverted away from the Drain field Area, or contained in an Infiltration Area suitably set back from the Drain Field Area.
- 4.) No Drain Field Trenches are to be installed beneath any Driveway or Parking Area.
- 5.) All Drain Field Trenches are to maintain a MINIMUM 5 foot Setback to All Property Lines & Lines of Easement, a 10 Foot Setback to all foundations, waterlines, And Curtain Drain (Uphill side), and a 30 Foot Setback to Curtain Drains or Foundation Drains that are DOWNSLOPE from the disposal component and to Seasonal Surface Water.
- 6.) Drain Field Trenches and any disposal component are to maintain a 100 foot setback All wells and Permanent Surface Water (Salt or Fresh).
- 7.) Where a Gravity System has been designed, but the Septic Tank and/or plumbing stub is too low & the trenches cannot be installed at the specified depth in the native soil, an effluent pump will be REQUIRED.
- 8.) Where Sand Filter Pre-Treatment has been proposed, the Sand Filter must be constructed in accordance with all the Diagrams and Specifications provided with the design. Substitution of "Pre-Fab Kits" or elimination of ANY of the specified components contained in the design is NOT permitted, as many of the components are designed to improve the performance and prolong the longevity of the system.
- 9.) The Reserve Area (or balance of the Drain Field and Reserve Area NOT used for the Primary Drain Field) is NOT to be encroached upon, or disturbed in any way that is NOT consistent with its designated use.

IMPORTANT NOTE:

Approx. 90-95% of ALL Drain field Failures of relatively NEW Septic Systems is due to damage and destruction of the soil structure during the initial clearing, or in the process of construction. ALL failures of this nature need not have occurred IF precautionary measures had been taken in the first place.

Currently the County Health Department requires that the Designer Oversee and Certify that the Septic System was installed in accordance with their Design. Depending on the Designer involved, this is the best guarantee that the Septic System will be properly installed and function well into the future. However, some installers have opted to change designers in order to institute modifications that will enable them to install cheaper parts, eliminate components, or simply implement "short-Cuts" that will enable them to underbid their competitors and increase their profit. The consequences of this potential "Designer Change" is twofold: First the original Designer is relieved of ANY responsibility for the function of the Septic System, and 2nd, another Designer who is neither familiar with the Design nor has any interest in it whatsoever is not going to insure that it is properly installed according to a design that is not his own. Often "changing Designers" for oversight purposes creates problems that are not easily discerned initially, but may become evident years after the system was installed. As such, it is the consumer (Property owner) that suffers, not the Installer or either Designer. The very best insurance that the Septic System is installed properly and in accordance with the Design is to have the ORIGINAL Designer Oversee its construction from start to finish, as the County Health Department originally intended.

CHARLES H. POLLMAR & ASSOCIATES

BOTTOMLESS SAND FILTER

BASAL AREA PREPARATION INSTRUCTIONS

WHILE THE TYPE OF "BOTTOMLESS" SAND FILTER MAY VARY, THE BASAL AREA PREPARATION REMAINS THE SAME, EXCEPT FOR THOSE THAT REPLACE GRAVEL BEDS WITHIN EXISTING SAND FILL SYSTEMS, WHERE EFFLUENT IS NOT SURFACING AT THE "TOE" OF A PRESSURE MOUND OR SOMEWHERE ELSE OTHER THAN IN THE VICINITY OF THE GRAVEL BED. THESE INSTRUCTIONS ARE INTENDED FOR BASAL AREAS THAT ARE ENTIRELY COMPRISED OF NATIVE SOIL – EITHER AT THE SURFACE OR BELOW GRADE, AS IS THE CASE WITH SAND FILTERS ARE EXCAVATED THROUGH OVERBURDEN OR SUB-STANDARD TOPSOILS TO BETTER DRAINING SOIL UNDERNEATH.

IN GENERAL, THE NATIVE SOIL IS TO BE EXCAVATED INTO AND "UPLIFTED" IN A FURROWED FASHION THAT ALLOWS THE SAND TO PENETRATE INTO THE UNDERLYING SOIL. WHILE A FARM STYLE "PLOW" MAY WORK IN A FARMERS FIELD, IT IS NOT ADEQUATE WHEN ROOTS AND ROCKS ARE PRESENT, AS IS THE CASE IN FORESTED OR FORMERLY WOODED PROPERTIES. IN GENERAL, THESE "FURROWS" ARE TO RUN LENGTHWISE IN THE BASAL AREA OF THE FILTER. WHERE A CONCRETE RECEPTACLE IS INVOLVED, LENGTHWISE "FURROWING" MAY NOT BE POSSIBLE. IN THESE CASES, THE "FURROWS" MAY RUN FROM SIDE TO SIDE. THE PURPOSE OF FURROWING IS SO THAT EFFLUENT CANNOT "SHEET" ON THE BASAL AREA AND "RUN" TO ONE SIDE OR THE OTHER AND UNDULY SATURATE ANY PORTION OF THE BASAL AREA.

THE "FURROWS", WHEN BACKFILLED WITH SAND, PROVIDE DIRECT ACCESS TO UNDERLYING STRUCTURED SOIL, AND THE "RAISED" PORTIONS ACT LIKE "WICKS" THAN CAN TRANSMIT EFFLUENT VIA CAPILLARY ACTION TO THE UNDERLYING SOIL, WHILE ALSO PREVENTING THE EFFLUENT FROM MIGRATING OUT OF THE FURROWS. THE BASAL AREA PREPARATION MUST BE INSPECTED BY THE DESIGNER, TO INSURE THAT IT IS PROPERLY DONE. ONCE THE BASAL AREA IS PREPARED, NO FOOT TRAFFIC IS TO BE ALLOWED UNTIL AFTER THE SAND HAS BEEN INSTALLED TO A DEPTH OF AT LEAST 1 FOOT. OBVIOUSLY, TRESPASSING WITH ANY SORT OF MACHINERY IS ALSO FORBIDDEN. IN SOME CASES, AT THE SOLE DISCRETION OF THE DESIGNER, IT MAY BE ADVANTAGEOUS TO INSTALL 6-12" OF SAND PRIOR TO BASAL AREA PREPARATION, SO THAT THE SAND FALLS INTO THE "FURROWS" AS THEY ARE EXCAVATED. IN MOST CASES, THIS METHOD WILL NOT BE USED.

WHENEVER POSSIBLE – ESPECIALLY WITH NEW CONSTRUCTION, THE SOIL MUST BE PREPARED ONLY WHEN THE SOIL IS IN A DRY STATE, PREFERABLY DURING THE SUMMER MONTHS. WHERE THIS IS NOT POSSIBLE, SUCH AS IN REPAIR SITUATIONS, IT CAN BE DONE DURING THE WINTER MONTHS, BUT NOT DURING PERIODS OF PROLONGED OR HEAVY PRECIPITATION. FOR WINTER OR WET WEATHER SITUATIONS, THE SAND FILTER SHOULD BE PROTECTED FROM THE RAIN WITH TARPS OR PLASTIC SHEETING TO THE GREATEST DEGREE POSSIBLE, UNTIL THE BASAL AREA IS PREPARED AND FILLED. ONCE FILLED WITH AT LEAST 12" OF SAND, THE BASAL AREA WILL BE PROTECTED FROM DAMAGE.

(2)

BASAL AREA PREPARATION IS TO BE DONE WITH A "BACK-HOE" STYLE EXCAVATION BUCKET ON EITHER A BACK-HOE OR AN EXCAVATOR. THE "BUCKET IS TO BE EQUIPPED WITH EXCAVATION "TEETH" FOR BETTER PENETRATION. GENERALLY SPEAKING, THE LONGER THE "TEETH" THE BETTER. IN CASES WHERE THE BASAL AREA IS COMPACTED, IT MAY EITHER BE RIPPED BY "CLEARING BLADE "TEETH" BY A BULLDOZER TO A DEPTH OF 12-18" OR WITH LONG TEETH ON A BUCKET, PRIOR TO THE ACTUAL BASAL AREA PREPARATION.

THE IMPORTANCE OF PROPER PREPARATION OF ANY BASAL AREA (MOUND OR BOTTOMLESS SAND FILTER) CANNOT BE OVEREMPHASIZED. IF THE BASAL AREA IS NOT PREPARED PROPERLY, RAINFALL AND EFFLUENT WILL NOT BE ABLE TO PENETRATE THROUGH THE BASAL AREA INTO THE UNDERLYING SOIL & WILL "BACK-UP" INTO THE SAND , CAUSING SATURATED CONDITIONS, BIOMAT FORMATION, AND, ULTIMATELY PREMATURE FAILURE OF THE SYSTEM. UNPREPARED BASAL AREAS "ACT" LIKE AN IMPERMEABLE BARRIER, NOT UNLIKE HARDPAN OR CLAY AND WILL SUPPORT A WATER TABLE ABOVE IT.

Client: BATTLE POINT PARK

"BOTTOMLESS" SAND FILTER SPECIFICATIONS:

A. NATIVE SOIL ABSORPTION DATA:

1.) ESTIMATED DAILY SEWAGE VOLUME: 576 Gallons [See ATTACHED Estimates]

A.) Bedrooms x 120 Gals./Bedroom/Day = Gallons

2.) BASAL AREA SPECIFICATIONS:

1.) Soil Type: Very Fine Sandy Loam / Silt Loam TYPE 5

2.) Infiltration Rate of Native Soil as per Application: .40 GPD/Ft.²

3.) MINIMUM Basal Area REQUIRED = 576 = 1,440 sq.ft.
.40

4.) BASAL AREA DIMENSIONS:

A.) Width = 10 Feet

B.) Length = 144 Feet (3 - 10'x 48' Components)

B. SAND FILTER GRAVEL BED SPECIFICATIONS:

1.) FILTER MATERIAL: MEDIUM TO COARSE SAND (SAND FILTER SAND)

2.) INFILTRATION RATE of Filter Material: 1.00 Gals./sq.ft./Day

3.) BASAL AREA REQUIRED = NA = sq.ft.

3.) GRAVEL BED DIMENSIONS:

1.) Width = 10 Feet

2.) Length = 48 Feet (x 3)

3.) Depth = 12 Inches

C.) SAND FILTER "RECEPTACLE" SPECIFICATIONS:

1.) TYPE of BOTTOMLESS SAND FILTER:

A.) EXCAVATION INTO NATIVE SOIL

2.) BASAL AREA is to be PREPARED in the Manner prescribed for MOUND Systems, PRIOR to the installation of the SAND. While NOT usually possible w/a Plow, churning UP with a BACK-HOE or EXCAVATOR bucket is usually adequate.

3.) MINIMUM DEPTH of FILTER MATERIAL = 4 Feet

A.) 24" BELOW Gravel Bed MINIMUM

B.) 12" GRAVEL BED DEPTH

C.) 12" ABOVE GRAVEL BED

D. DISTRIBUTION SYSTEM SPECIFICATIONS:

1.) LATERALS:

A.) Number of Laterals = 24 (12 Sets / 4 Sets per Component)

B.) Length per Set = 46 Feet (23 Feet on either side of MANIFOLD)

C.) PIPE: 1 1/4" PVC Plastic Pipe (Schedule 40)

2.) ORIFICES AND SPACING:

A.) Orifice Size: 3/16" Diameter

B.) Orifice Spacing: 24" Intervals [EXCEPT Where Noted Otherwise]

C.) Orifices per Lateral = 12 Orifices per Zone = 48 Orifices per Component = 96

1.) TOTAL Number of Orifices = 192

D.) Orifice Position = 6: 00 Downward, EXCEPT End Orifices Which Are To Be @ 12:00
(UPWARD) With Orifice Shields



3.) MANIFOLD

- A.) Diameter = 1.5 Inches
B.) Length = 2 Feet
C.) Position: BELOW Level of Laterals: TEE / TEE CONSTRUCTION

E. DOSING DATA: [Based on Dosage through 6 Zone INDEXING VALVE]

- 1.) Total Lineal Feet of Laterals = 552 Feet / 92 Lineal Feet per Zone
2.) Total Number of Orifices = 192 / 48 Orifices per Zone
3.) Liquid Capacity of LATERALS = 6 Gallons
A.) COMPUTATION:
X 23.00 Feet (Lateral Length)
4 (Number of Laterals per Zone)
92.00 Feet x (.064 Gals./Ft.) = 5.888 Gallons

4.) DOSING VOLUME:

- A.) 5 X INTERIOR VOLUME of Laterals = 30 GALLONS/DOSE
B.) VOLUME at 1/2 Gallon per Orifice per Cycle = 24 GALLONS/DOSE
C.) RECOMMENDED DOSAGE VOLUME = 48 GALLONS/DOSE

G. PUMP DATA:

- 1.) REQUIRED Pump Capacity = 30 Gallons/Minute (MINIMUM)
A.) COMPUTATION:
X .59 DISCHARGE RATE (Gallons/Orifice/Minute)
48 TOTAL Number of Orifices per Zone
28.32 Or 30 Gallons/Minute

2.) TRANSPORT PIPE:

- A.) Diameter = 2 Inches
B.) Length = 100 Feet (ESTIMATED)

3.) PUMP HEAD PRESSURE:

- A.) Elevation Difference = 6 Feet (ESTIMATED)
1.) Level of Pump to Level of Laterals
B.) MINIMUM Residual Head REQUIRED = 2 Feet
C.) Friction Loss in TRANSPORT PIPE = 1.82 Feet
1.) CALCULATED By Formula XX YES NO
2.) COMPUTED VALUE: 1.821466121
D.) Friction Loss in Distribution Network = 11 Feet (ESTIMATED - May Vary)
E.) COMPUTATION:
+ 6.00 Feet (Elevation Difference)
+ 2.00 (MINIMUM Residual Head REQUIRED)
+ 1.82 (Friction Loss - TRANSPORT PIPE)
+ 11.00 (Friction Loss - DISTRIBUTION NETWORK)
+ 5.00 (Friction Loss - INDEXING VALVE)
25.82 Or 30 Feet TOTAL HEAD

- 4.) SUMMARY: The Pump chosen must be capable of Pumping at the Rate of 30 Gallons Per Minute against a Head Pressure of Approx. 30 Feet.

NOTE: Friction Losses can vary greatly, depending on Number and Type of Fittings, as well as Distance, Pipe Diameter, and Effluent Velocity (GPM). Friction Losses MAY be greater Than Estimated & should be re-calculated / reviewed @ time of construction.


H. IMPORTANT NOTES: PRIOR to the selection of the Effluent Pump ALL Estimated Values (Elevations Differences, Distances, Etc.) **MUST be Checked by DIRECT Measurement**; to insure the Pump is properly sized for the System AS-BUILT. **RUN TIMES** of less than ½ a minute for the effluent pump is **NOT RECOMMENDED**. Settings of LESS than 30 seconds MAY result in inadequate lubrication of the pump and shortened pump life. While Dosage Intervals of 2 hours (12 times per day) MAY be ideal, greater intervals between doses and greater dosage volume than ½ gallons per orifice per cycle, MAY help promote pump longevity WITHOUT compromising the function or longevity of the sand filter. This designer recommends a MINIMUM of 5 times the interior volume of the laterals as the MINIMUM dosage volume under ALL Circumstances.

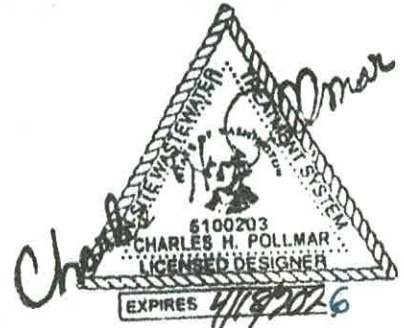
I. SPECIAL NOTES: PVC FORCED VENTILATION PIPING, and 4" PVC VENTILATION PIPES ARE REQUIRED BY THIS DESIGNER. AN ORENCO MVP CONTROL PANEL IS SPECIFIED FOR THIS APPLICATION - NO SUBSTITUTIONS.

A "REDUNDANT OFF" Float is REQUIRED, along with the High Water Alarm And Operational Floats: NO EXCEPTIONS. By shutting the system down, the Redundant Off Float protects the pump in the event that the Operational Float fails and sets off a "Low Water Alarm" that notifies the consumer that there is a problem BEFORE any damage occurs.

4" PONDING OBSERVATION PORT CROSS-SECTIONAL VIEW

10" VALVE BOX
W/LID

 = GRAVEL BED
OR TRENCH



FILTER FABRIC @ AND
AROUND BASE W/GRAVEL
INSIDE BOX

TRENCH- OR BED

SAND OR SOIL

INTERFACE

OPEN @
INTERFACE

NOTE:

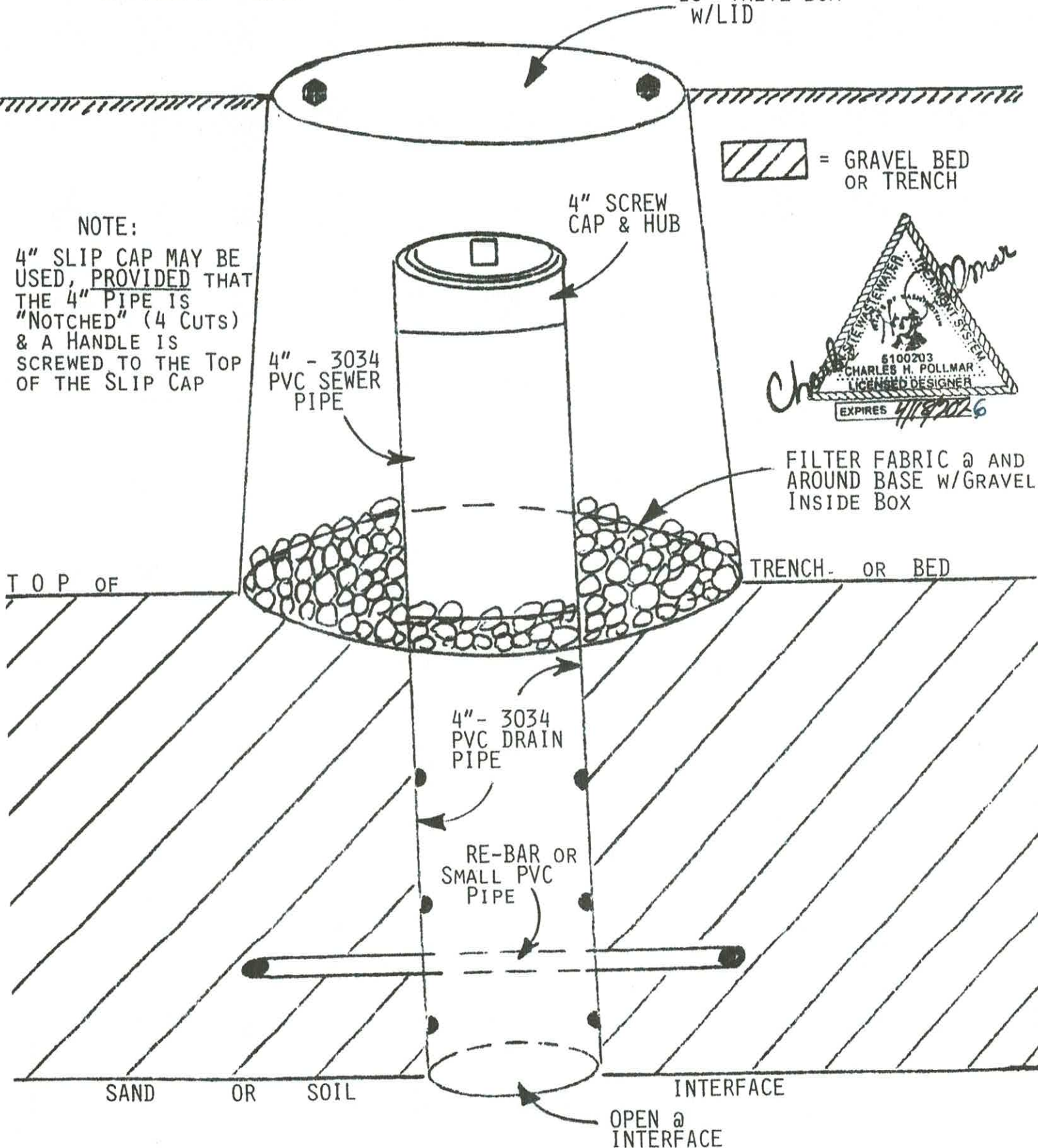
4" SLIP CAP MAY BE
USED, PROVIDED THAT
THE 4" PIPE IS
"NOTCHED" (4 CUTS)
& A HANDLE IS
SCREWED TO THE TOP
OF THE SLIP CAP

4" SCREW
CAP & HUB

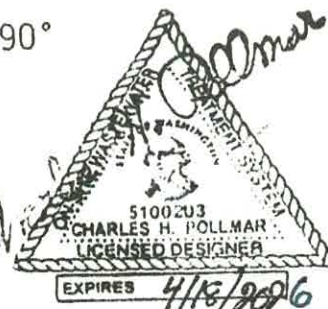
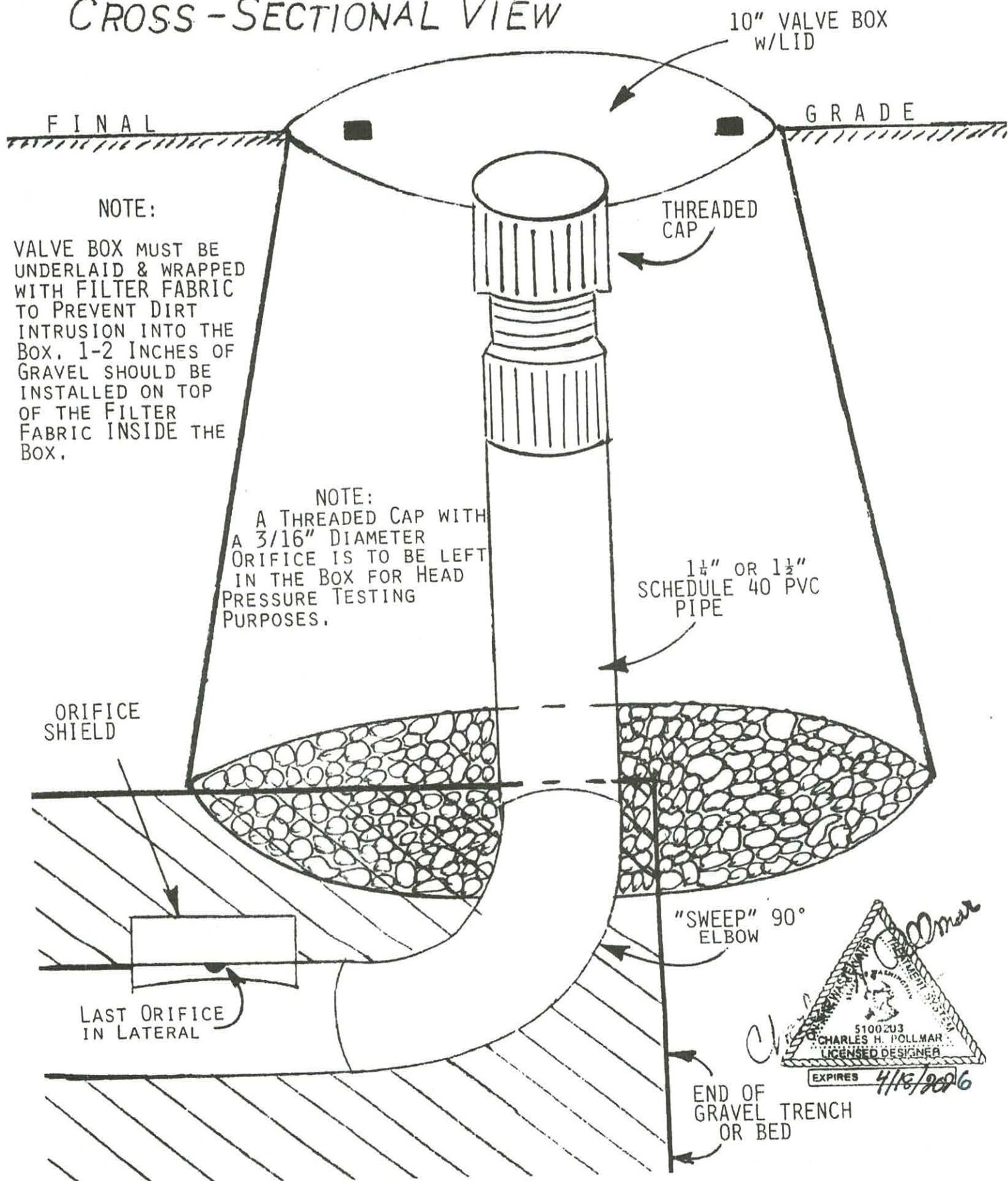
4" - 3034
PVC SEWER
PIPE

4" - 3034
PVC DRAIN
PIPE

RE-BAR OR
SMALL PVC
PIPE



LATERAL END ACCESS PORT CROSS-SECTIONAL VIEW



COMPOSITE PUMP TANK CROSS-SECTIONAL VIEW

W/PUMP, PIPING, & FLOAT DETAIL

DIAGRAM SIZE: SCALE:

8 1/2" x 11" 1" = 2 FEET
11" x 17" 1 INCH = 1 FOOT

4" - 3034 PVC SEWER PIPE (FROM SEPTIC TANK)

INLET PIPE

REINFORCED CONCRETE TANK WALL

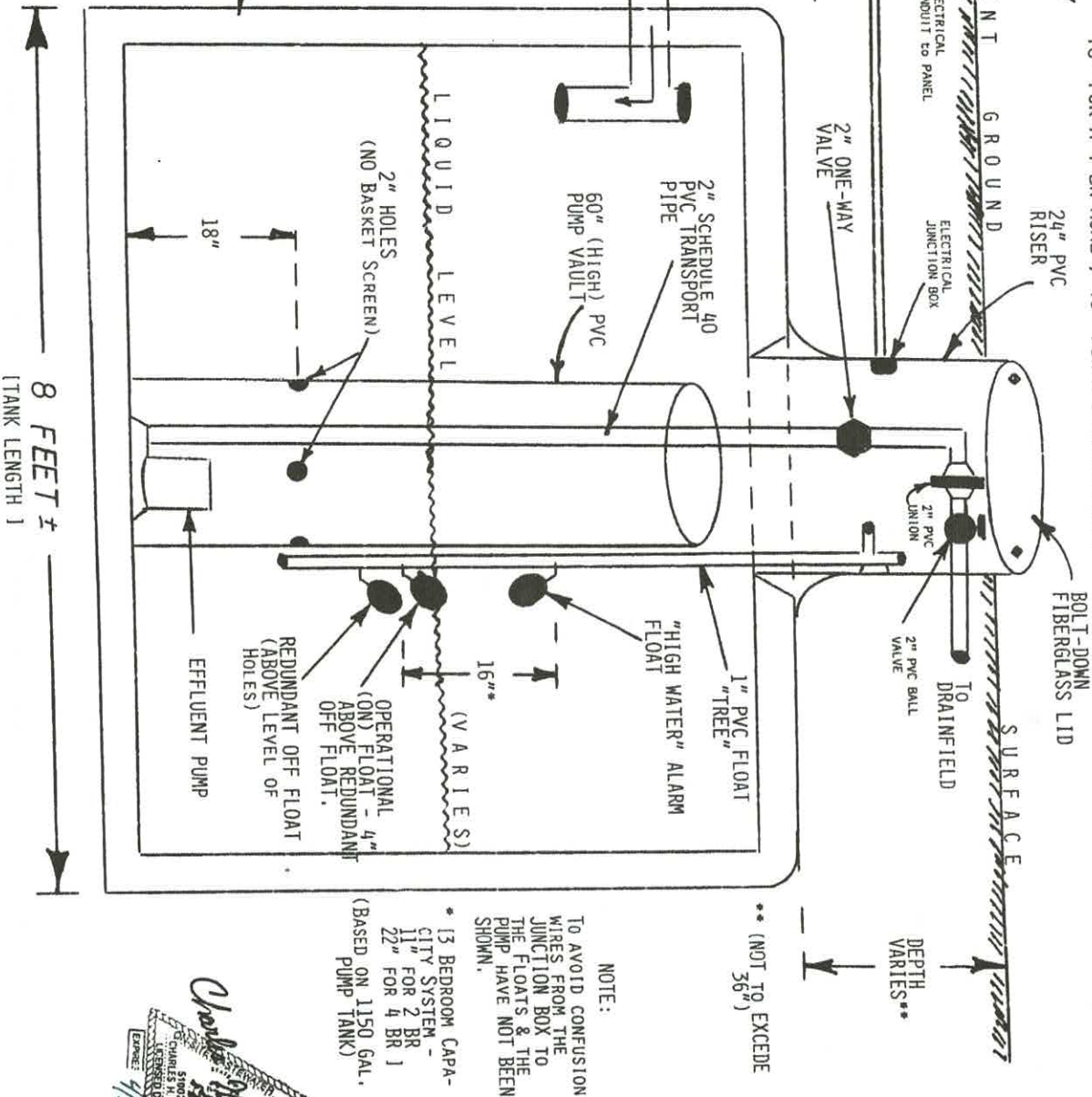
IN SYSTEMS WHERE AN INDEXING VALVE HAS BEEN SPECIFIED, A TURBINE PUMP IS REQUIRED. THE TURBINE PUMP MAY BE INSTALLED IN AN ORENCO BIOTUBE PUMP VAULT OR IN A 5 FOOT PVC PUMP VAULT. A FLOW INDUCER MAY BE USED, PROVIDED THAT THE INTAKE IS 18" ABOVE THE BOTTOM OF THE TANK.

A 1500 GALLON TANK HAS A VOLUME OF 31 1/2 GALS./IN DISTANCE BETWEEN "HIGH WATER ALARM" FLOAT & OPERATIONAL ("ON / OFF") FLOAT WOULD BE: 16" FOR A 4 BR HOME / 19" FOR A 5 BR CAPACITY

NOTE:

NOTE:

THIS DIAGRAM APPLIES MAINLY TO PRESSURE DISTRIBUTION DRAINFIELDS W/CENTRIFUGAL EFFLUENT PUMPS. FOR DRIP IRRIGATION DISPOSAL SYSTEMS, AN ORENCO BIOTUBE PUMP VAULT IS REQUIRED, WHICH INCLUDES THE EFFLUENT SCREEN & A VAULT FOR A TURBINE PUMP.



NOTE: TO AVOID CONFUSION WIRES FROM THE JUNCTION BOX TO THE FLOATS & THE PUMP HAVE NOT BEEN SHOWN.

* 13 BEDROOM CAPACITY SYSTEM - 11" FOR 2 BR 22" FOR 4 BR 1 (BASED ON 1150 GAL. PUMP TANK)

Charles K. Polmar
4/15/2006

TYPICAL AIR DISPERSION MANIFOLD AND PIPING OVERVIEW

SCALE: 1" = 1 FOOT



IMPORTANT NOTE:

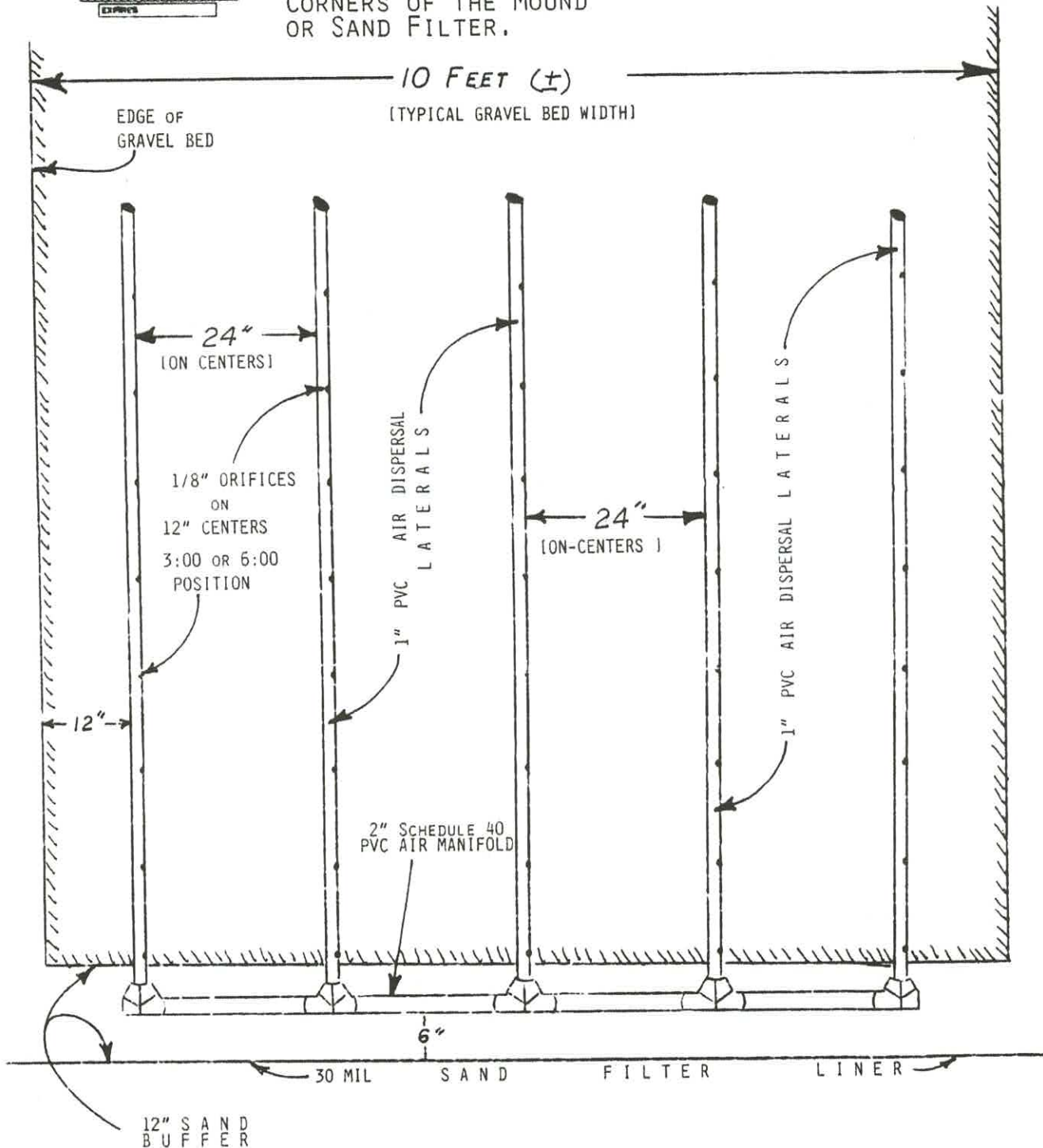
2" PVC MANIFOLD IS TO BE INSTALLED @ BOTH ENDS WITH A 2" PVC STANDPIPE @ OPPOSITE CORNERS OF THE MOUND OR SAND FILTER.

NOTE:

THIS DIAGRAM IS INTENDED TO COVER GRAVEL BEDS OF VARYING WIDTHS & LENGTHS. DEPENDING ON GRAVEL BED WIDTH, THE NUMBER OF AIR DISPERSAL LATERALS MAY BE INCREASED OR DECREASED AS NEEDED, WHILE MAINTAINING HORIZONTAL SPACING NO GREATER THAN 24" (ON CENTERS) W/ORIFICE SPACING @ 12" INTERVALS.

ORIFICES ARE GENERALLY TO BE @ 6:00 POSITION (DOWNWARD) W/AT LEAST 1 ORIFICE @ 12:00 (UPWARD) PER LATERAL. ORIFICES MAY BE DRILLED THROUGH THE PIPE TO PROVIDE 2 ORIFICES EVERY FOOT.

AIR DISPERSAL LATERALS TO BE INSTALLED 12" FROM THE EDGE OF THE SAND FILTER, ON 24" CENTERS.



FORCED AIR MANIFOLD TO AIR DISPERSION LATERALS DETAIL

SCALE: 1" = 3 INCHES
(11" x 17" DIAGRAM)

NOTE:

PIPING IS TO BE INSTALLED APPROX.
MID-WAY BETWEEN GRAVEL BEDS IN
SAND FILTER INSTALLATIONS, OR 12"
BELOW THE UPPER GRAVEL BED.

IN MOUNDS, PIPING SHOULD BE 12"
BELOW THE GRAVEL BED WITH 6"
SEPARATION MINIMUM, WHERE 12" IS
NOT POSSIBLE IN KEEPING LATERALS
COMPLETELY IN THE SAND.

1/8" ORIFICES

ON

12" CENTERS

@

6:00 POSITION (DOWNWARD)

OR

@ 3:00 POSITION
(HORIZONTAL)

AT LEAST 1 ORIFICE IS TO BE
@ 12:00 POSITION (UPWARD)
COVERED BY AN ORIFICE
SHIELD (SOLID TOP)

1" SCHEDULE 40
PVC PIPE

IMPORTANT NOTE:

2" PVC MANIFOLD IS
TO BE INSTALLED @
BOTH ENDS WITH A
2" PVC STANDPIPE
@ OPPOSITE CORNERS
OF THE MOUND OR
SAND FILTER.

24 INCHES
(ON CENTERS)

1" SCHEDULE 40
PVC PIPE



2" TO 1"
REDUCERS

2" PVC AIR MANIFOLD

2" PVC
TEE

2" PVC
TEE

6"±

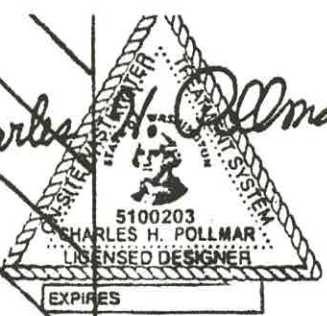
30 MIL SAND FILTER LINER

FORCED AIR MANIFOLD END DETAIL

[APPLIES TO BOTH SIDES OF SAND FILTER / MOUND]

FINAL GRADE

SCALE: 1" = 6 INCHES



1 1/4" PVC
LATERALS

2" THREADED
CAP

10" VALVE
BOX

GRAVEL

BED

4" PVC "PASSIVE" AIR
VENTILATION PIPING

1" AIR DISPERSION
LATERALS

2" PVC
STANDPIPE
@ OPPOSITE
CORNERS

2" AIR DISPERSION MANIFOLD @ BOTH ENDS

2" PVC
90° ELBOW

12"

IN MOUND
OVERVIEW,

SCALE:

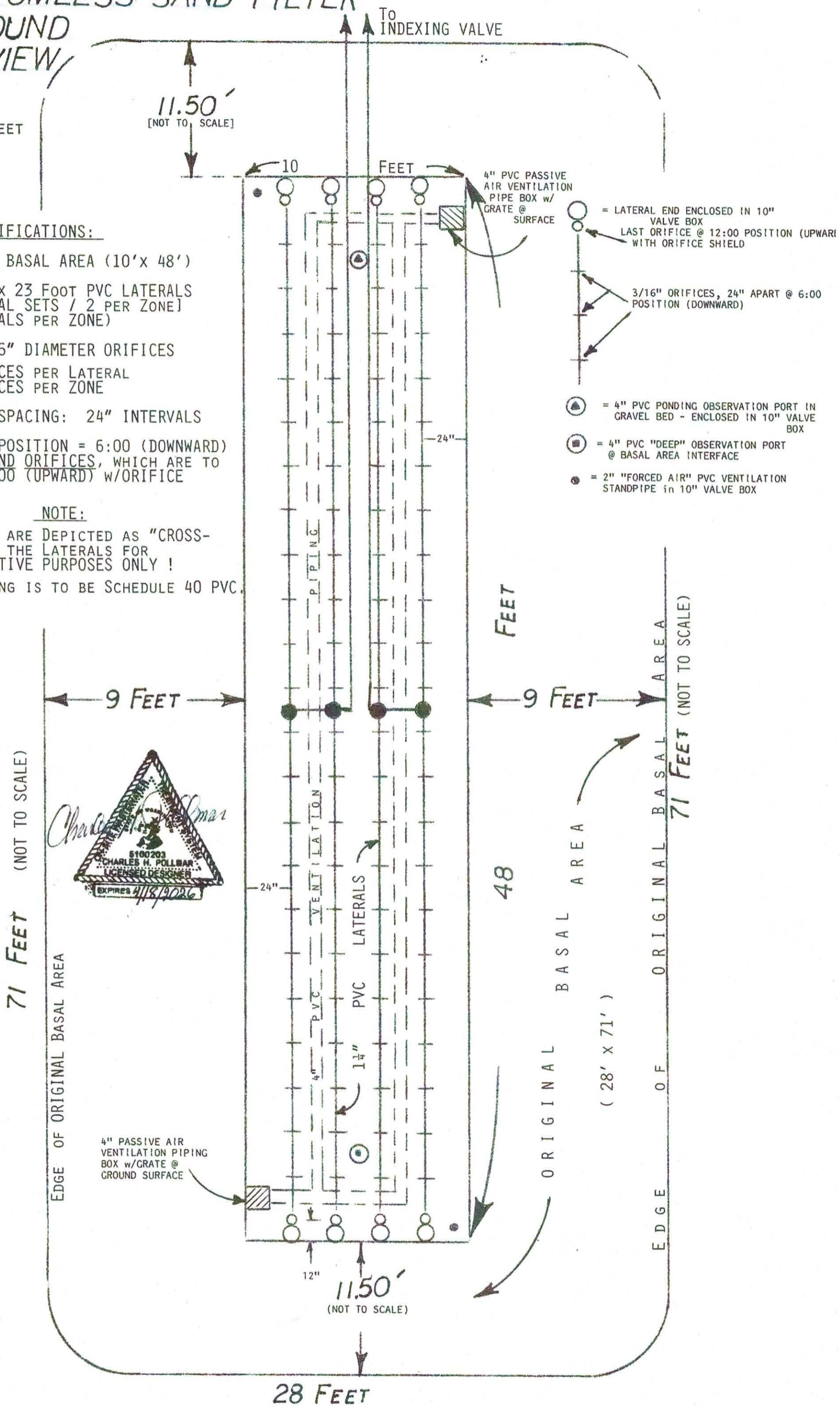
1 INCH = 4 FEET

SPECIFICATIONS:

- 1.) 480 FT.² BASAL AREA (10' X 48')
- 2.) 8 - 1 1/4" X 23 FOOT PVC LATERALS
[4 LATERAL SETS / 2 PER ZONE]
(4 LATERALS PER ZONE)
- 3.) 96 - 3/16" DIAMETER ORIFICES
12 ORIFICES PER LATERAL
48 ORIFICES PER ZONE
- 4.) ORIFICE SPACING: 24" INTERVALS
- 5.) ORIFICE POSITION = 6:00 (DOWNWARD)
EXCEPT END ORIFICES, WHICH ARE TO
BE @ 12:00 (UPWARD) W/ORIFICE
SHIELDS

NOTE:

ORIFICES ARE DEPICTED AS "CROSS-
BARS" ON THE LATERALS FOR
ILLUSTRATIVE PURPOSES ONLY !
ALL PIPING IS TO BE SCHEDULE 40 PVC.



BOTTOMLESS SAND FILTER AND PIPING OVERVIEW

SCALE: 1 INCH = 4 FEET

SPECIFICATIONS - BOTH COMPONENTS:

- 1.) 960 FT.² BASAL ABSORPTION AREA
[2 - 10'x 48' (480 FT.²) COMPONENTS]
- 2.) 16 - 1 1/4" x 23 FOOT PVC LATERALS
8 LATERAL SETS / 4 SETS PER COMPONENT
4 LATERALS PER ZONE
- 3.) 192 - 3/16" DIAMETER ORIFICES
96 ORIFICES PER COMPONENT
12 ORIFICES PER LATERAL
48 ORIFICES PER ZONE
- 4.) ORIFICE SPACING:
24" INTERVALS
- 5.) ORIFICE POSITION =
6:00 (DOWNWARD)
EXCEPT END ORIFICES, WHICH
ARE TO BE AT
12:00 POSITION
(UPWARD) WITH
ORIFICE SHIELDS

NOTE:

ORIFICES ARE DEPICTED AS
"CROSS-BARS" ON THE LATERALS
FOR ILLUSTRATIVE PURPOSES
ONLY !

ALL PIPING IS TO BE
SCHEDULE 40 PVC

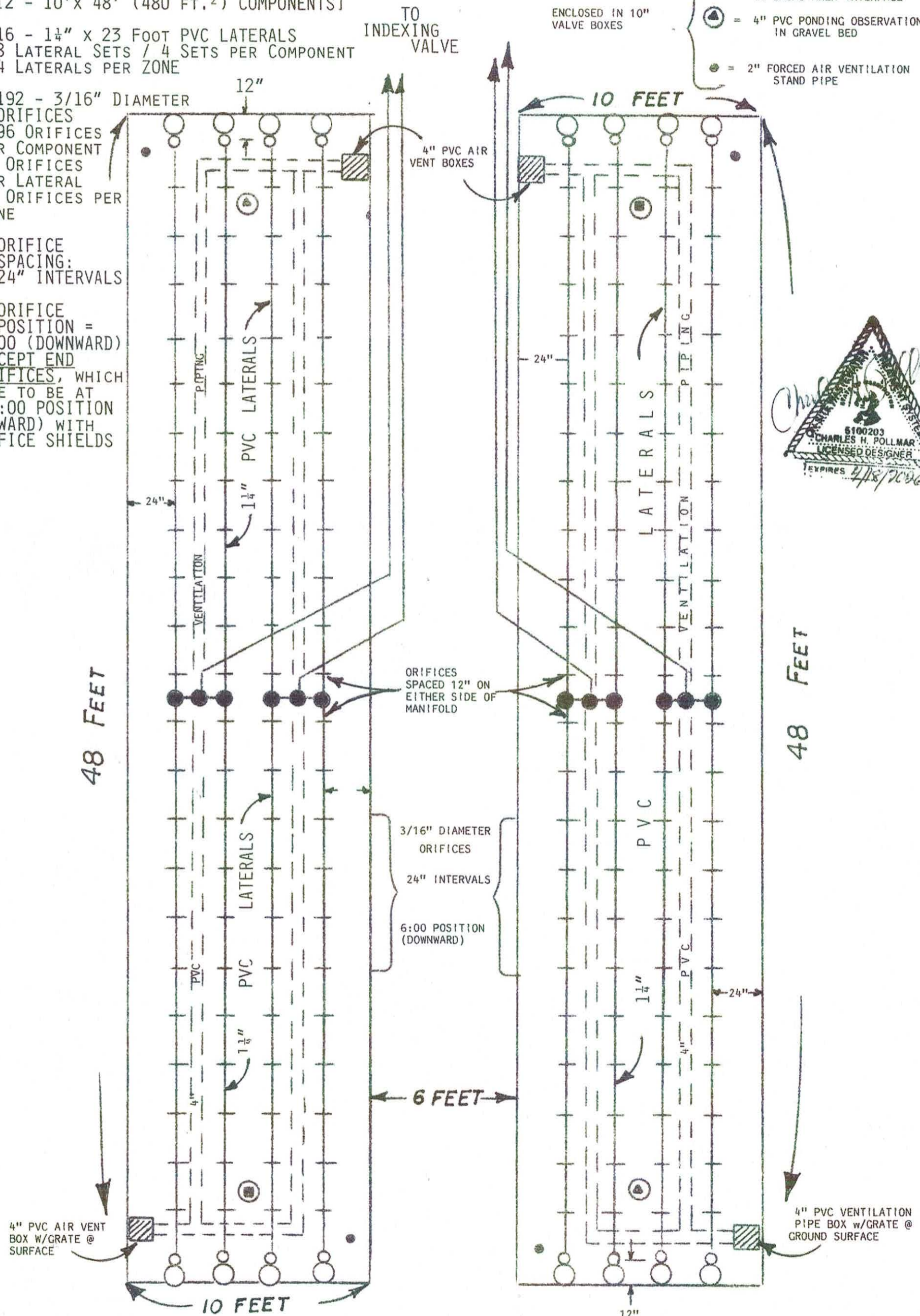
= LATERAL END ENCLOSED IN
10" VALVE BOX
LAST ORIFICE @ 12:00 POSITION
(UPWARD) w/ORIFICE SHIELD

3/16" ORIFICES, 24" APART,
@ 6:00 POSITION (DOWNWARD)

= 4" PVC "DEEP" OBSERVATION PORT
TO BASAL AREA INTERFACE


= 4" PVC PONDING OBSERVATION PORT
IN GRAVEL BED

= 2" FORCED AIR VENTILATION
STAND PIPE

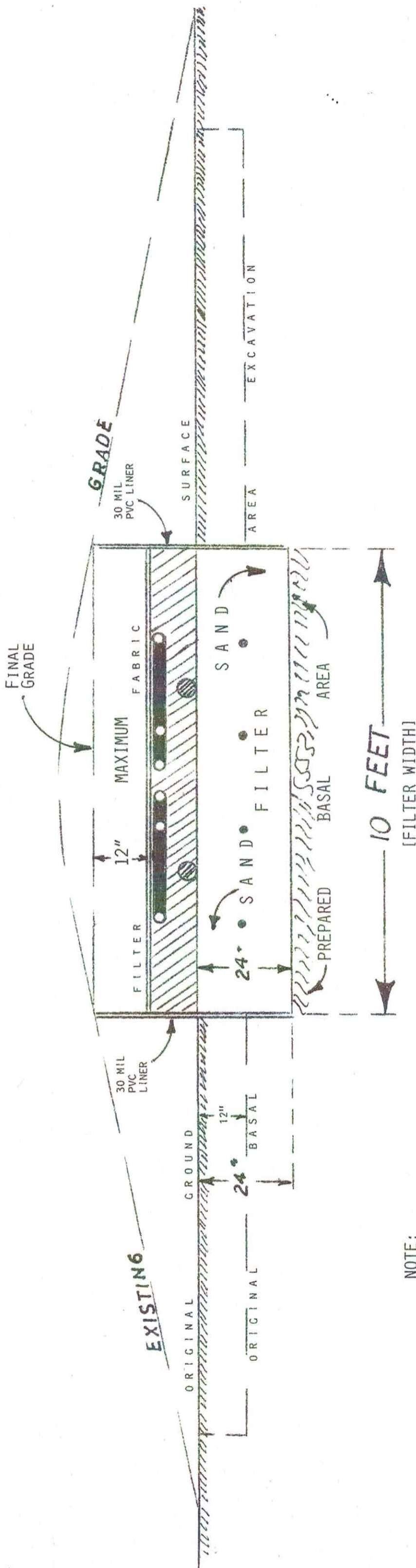


BOTTOMLESS SAND FILTER "MOUND" COMPONENT (1 of 3) CROSS-SECTIONAL VIEW

- O = 1 1/4" PVC LATERAL
- = 4" PVC VENTILATION PIPING (PASSIVE)
- = 1" FORCED AIR VENTILATION PIPE (ACTIVE)

 = 7/8" WASHED GRAVEL

SCALE: 1 INCH = 2 FEET



NOTE:

FILTER IS EXCAVATED 12" DEEPER THAN THE ORIGINAL MOUND EXCAVATION OR 24" BELOW ORIGINAL GRADE.

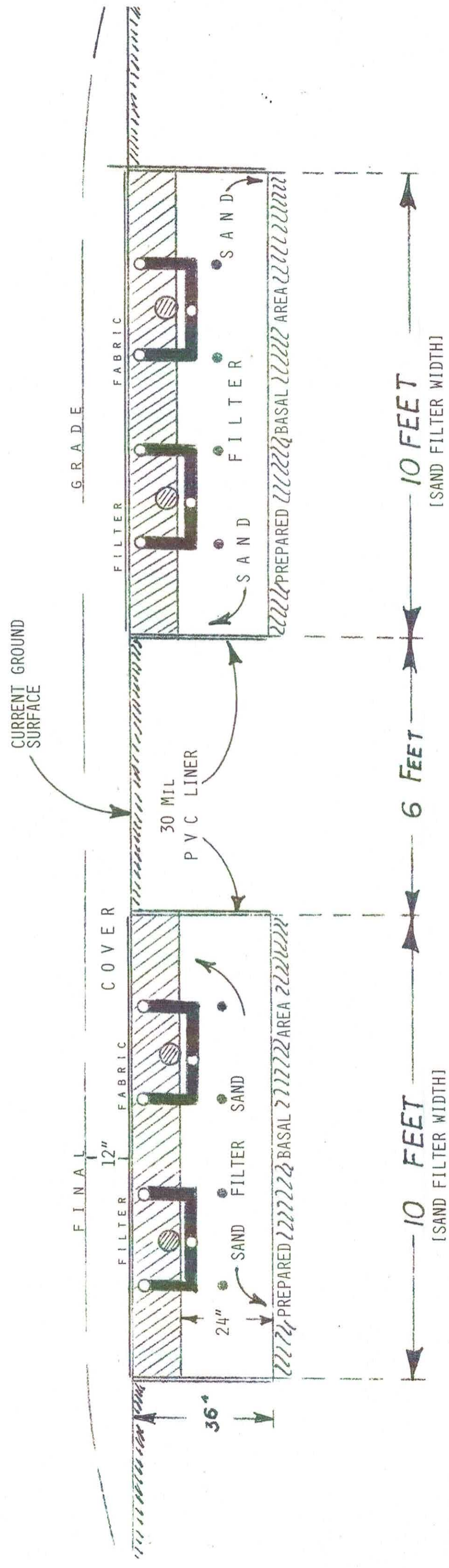
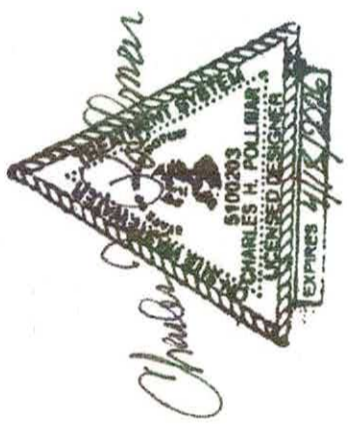


BOTTOMLESS SAND FILTER COMPONENT (2 OF 3) CROSS-SECTIONAL VIEW

SCALE: 1 INCH = 2 FEET

- = 1 1/4" PVC LATERALS
- ⊗ = 4" PVC VENTILATION PIPE (PASSIVE AIR)
- = 1" PVC "FORCED AIR" VENTILATION PIPING (ACTIVE AIR)

▨ = 7/8" WASHED GRAVEL



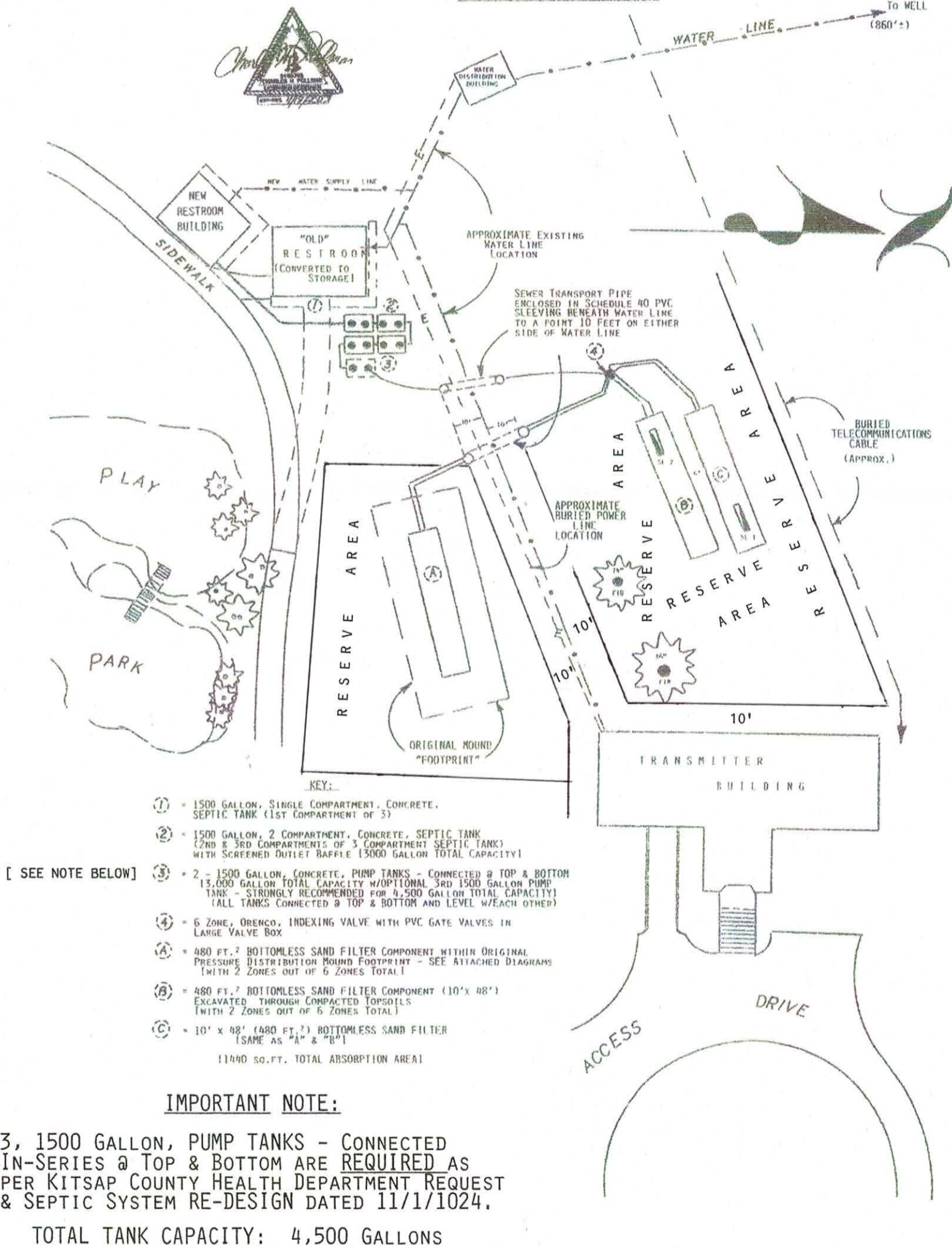
IMPORTANT NOTE:

ANY "CHANGE IN DESIGNER" FOR THIS INSTALLATION WILL RENDER THIS DESIGN NULL AND VOID.

TO "CHANGE" DESIGNERS, A COMPLETE RE-DESIGN WILL BE REQUIRED, WITH NEW SOIL LOGS AND A TOTALLY NEW DESIGN.

PLOT
PLAN
340' x 480'

DIAGRAM SIZE	SCALE:
11" x 17"	1 INCH = 40 FEET
18" x 24"	1 INCH = 20 FEET



Scale 1"=100'
Assumed

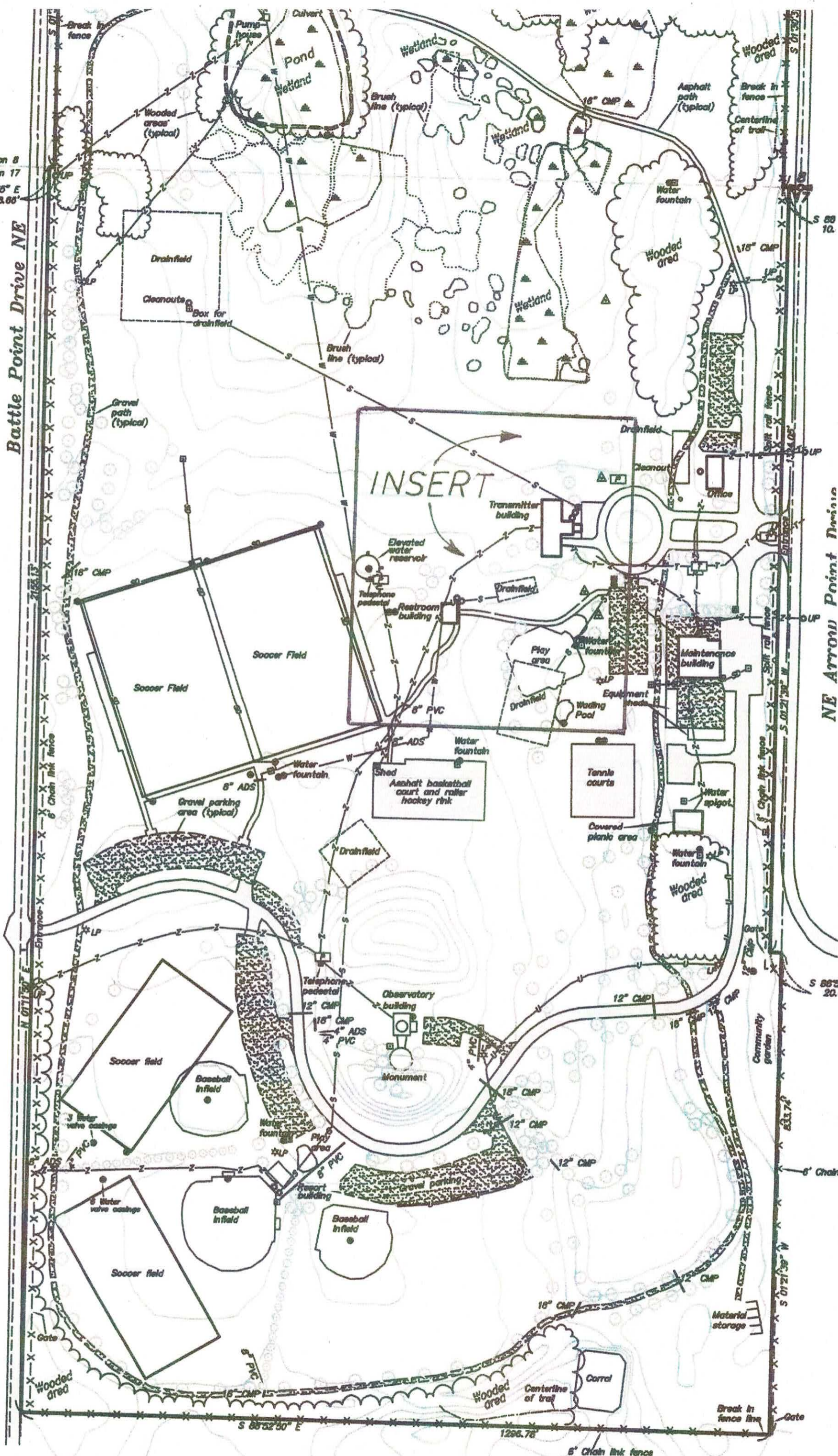
Section 8
Section 17
S 88°50'55" E
8.66'

Battle Point Drive NE

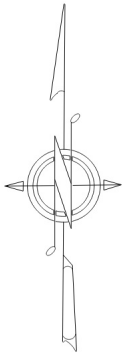
NE Arrow Point Drive



OVERALL VIEW



Utility Map



Point

- Sanitary Sewer Tank Lid
- ▲ Site Misc Tree
- Water Valve

Lines

- Electrical Cable
- Low Voltage Line
- Sanitary Sewer Pipe
- Telecom Fiber Optic
- Unknown Line
- Water Pipe

Area

- Sanitary Sewer Tank Footprint

