



## **South Kitsap Water Reclamation Facility Storage Building**

**Project Location: 1165 Beach Drive East, Port Orchard, WA 98366**



**2/24/2017**

**SKWRF Storage Building**

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# SKWRF Storage Building

## SPECIFICATIONS

These specifications provide for supply and installation of materials and labor for the completion of a Storage Building at the South Kitsap Water Reclamation Facility (SKWRF), Port Orchard, WA.

Due to the dynamics of the project, contractors are strongly encouraged to make a site visit prior to bidding. Contractors will be accommodated for site visits from 8:00 am – 3:00 pm Monday through Friday. Please call 360-895-6926 for accommodation.

Bids must be received at West Sound Utility District 2924 SE Lund Ave. Port Orchard WA no later than 11:00 a.m., 3/28/2017 . All prices quoted shall be for complete job.

West Sound Utility District desires to have the work as identified completed by 9/30/2017.

West Sound Utility District reserves the right to reject any and all bids or the bidding. Instructions to bidders and specifications are depicted on attached sheets.

The firm awarded the contract must be enrolled as a member of the Washington State Shared Small Works/ Consultant Roster prior to issuance of a contract with the District. A link for membership is <http://www.mrscrosters.org>.

Additionally, a business license with the City of Port Orchard is required as work will be within the city limits. A link for information and application is <http://bls.dor.wa.gov/cities/portorchard.aspx>.

## SECTION I

### NOTICE TO BIDDERS

Notice is hereby given that bids will be received by the West Sound Utility District, 2924 SE Lund Avenue, Port Orchard, Washington, 98366, until the hour of 11:00 a.m., 3/28/2017. The contract provides for supply of materials and labor for completion of at SKWRF. The plans, specifications and proposal forms are attached and also available at SKWRF, 1165 Beach Drive E., Port Orchard, Washington, 98366. Contact Mr. Randy Screws, SKWRF Plant Manager, with questions on this project at (360) 895-6926. West Sound Utility District reserves the right to reject any and all bids or the bidding.

**Bids are due to the District by 3/28/2017 11:00 AM.**

**IMPORTANT: Page numbers 7, 8, and 14 of this document must be completed and included with bid submitted.**

**VIA MAIL OR HAND DELIVERY TO THE FRONT DESK ONLY TO:**

**West Sound Utility District  
SKWRF Storage Building  
ATTN: Michael Wilson  
2924 SE Lund Ave  
Port Orchard, WA 98366**

## INSTRUCTIONS TO BIDDERS

**EXAMINATION OF SITE AND CONDITIONS:** Before making this bid, the bidder shall examine the site of the work and ascertain for themselves all the physical conditions in relation thereto. Failure to take this precaution will not release the successful bidder from entering into contracts nor excuse him from performing the work in strict accordance with the terms of the contract.

No statement made by any office, agent, or employee of the District in relation to the physical conditions pertaining to the site or the work will be binding on the District.

**FORM OF BID:** Proposals shall be made upon the form provided therefore. They shall contain no recapitulation of the work to be done and no exceptions to the requirements of the plans and specifications. All blank spaces in the form shall be filled except those not needed for a complete listing of the partners or principals of the bidding firm and except those spaces provided for alternate bids may be left blank if the bidder does not wish to bid the alternate. Erasure, interlineation, or other corrections must be initialed by the person or persons signing the bid.

**SIGNATURE:** Each bid must be signed in long hand by the bidder with their usual signature. Bids by partnerships must be signed with the partnership name by one of the partners, followed by the signature and designation of the partner signing. Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and the signature of the president, secretary, or other person authorized to bind it in the matter.

**SUBMISSION OF BID:** Bid shall be enclosed in an opaque sealed envelope, addressed to the official named in the NOTICE TO BIDDERS, and delivered as required by the NOTICE TO BIDDERS.

**MODIFICATION OF PROPOSALS:** Modification of proposals already received will be considered only if the request and modification are made prior to the scheduled closing time for the receipt of the proposals. All modifications must be made in writing over the signature of the bidder.

**WITHDRAWAL OF PROPOSAL:** At any time prior to the scheduled closing time for receipt of proposals, any bidder may withdraw their proposal, either personally, or by written request. After the scheduled closing time for receipt of proposals or before award of contract, no bidder will be permitted to withdraw his proposal unless said award is delayed for a period exceeding thirty (30) days.

**EVIDENCE OF QUALIFICATIONS:** Upon request of the District, a bidder whose bid is under consideration for the award of the contract shall submit promptly to the District satisfactory evidence of the bidder's financial resources, his experience, and the organization and equipment he has available for the performance of the contract.

**REJECTION OF BIDS:** The District reserves the right to reject any and/or all proposals and also the right to waive any formalities in connection with said proposals or bids.

**PAYMENTS TO CONTRACTOR:** All payments to the contractor for construction performed on this project will be by CASH WARRANTS.

**EXECUTION OF CONTRACT:** Within ten (10) days after receiving contract documents from District, the successful bidder will be required to execute said contract.

PROPOSAL

**SKWRF Storage Building**

BIDDER: \_\_\_\_\_

DATE: \_\_\_\_\_

Board of Commissioners  
West Sound Utility District  
2924 SE Lund Avenue  
Port Orchard, WA 98366

Ladies and Gentlemen,

Pursuant to and in compliance with your invitation for bid for supply and completion of a storage building at the South Kitsap Water Reclamation Facility, as per the plans and specifications which are included with the package and available at the District's office, the undersigned has carefully examined the specifications as well as the premises and conditions affecting the work and hereby proposes to perform all work as required for construction of such improvements in strict accordance with contract documents, specifications, and drawings for the amount shown.

All prices are exclusive of State Sales Tax. Bid sheets attached.

I certify that the company is not disqualified from bidding this contract, under RCW 39.06.010 or 39.12.065(3).

Evidence of Qualification:

Washington State Contractor Registration Number: \_\_\_\_\_

Washington Unified Business Identifier (UBI) Registration Number: \_\_\_\_\_

Washington State Employment Security Number: \_\_\_\_\_

Washington State Excise Tax Registration  
Number: \_\_\_\_\_

\_\_\_\_\_

(Bidder's Signature)

The party by whom this proposal is submitted and by whom the contract will be entered into in case the award is made to them is

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(State whether bidder is a corporation, a partnership, or an individual.)

doing business

---

address

city and state

which is the address to which all communications concerned with the proposal and contract should be sent.

The name of the president, treasurer, and manager of the bidding corporation, or the names of all persons and parties interested in this proposal as partner's or principals are as follows:

Name

Address

<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>



**SMALL WORKS CONTRACT**

Parties: WEST SOUND UTILITY DISTRICT

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This is an agreement entered into between West Sound Utility District, a Washington State Municipal Corporation, hereinafter called "District," and \_\_\_\_\_ hereinafter called "Contractor."

Contractor is currently listed on the District's Small Works Roster pursuant to RCW 57.08.050. Pursuant to its resolutions and procedures, the District has determined the Contractor to be the lowest responsible bidder to perform the services hereinafter described. The purpose of this document is to set forth the specific terms of the parties' agreement in writing.

Now, therefore, in consideration of the foregoing recitals and the promises and covenants of the parties hereinafter set forth, they agree as follows:

1. Services to be performed by Contractor. The services to be performed are identified in the attached plans and specifications, referred to as Attachment "A" which by this reference is incorporated herein. In performing its work, the Contractor shall supply all necessary labor and materials to fully and completely finish the work called for herein.

2. Payment for Services. The total payment from the District to the Contractor for the work to be performed by the Contractor as described herein shall be the total sum of \$ \_\_\_\_\_ plus applicable Washington State sales tax. Payment of this said amount shall be due and owing within forty-five days of the completion of the work by the Contractor and acceptance by the District. Acceptance shall not be unreasonably withheld.

3. Commencement/Completion of Work. The contractor shall commence its work for the District on or before \_\_\_\_\_. All work called for herein shall be fully completed by the Contractor on or before \_\_\_\_\_.

4. Contractor Representations. The Contractor hereby represents and warrants to the District as follows:

A. Bonding Company and License No. The Contractor is fully licensed, bonded, and in good standing with the State of Washington.

It's Contractor License Number with Washington State is \_\_\_\_\_

1) It is currently bonded with the following bonding company to do business in the State of Washington

a) Bond No. \_\_\_\_\_.

b) This bond was issued on the \_\_\_\_\_, day of \_\_\_\_\_, 20\_\_\_\_.

2) In addition to the above, the Contractor is required to provide Payment in accordance with the Prevailing Wage regulations prior to the commencement of work.

B. Evidence of Insurance. Prior to performing its construction work, the Contractor shall provide the District with written evidence of insurance covering public liability and property damage concerning the work to be performed. If the total amount of services to be performed by the Contractor exceeds five thousand and 00/100 dollars (\$5,000.00) the coverage limits for liability shall be not less than as set forth on Attachment "B" entitled "Minimum Requirements for Certificates of Insurance" which by this reference is incorporated herein and made a part hereof. In the event Attachment "B" is applicable hereto, the Contractor shall be obligated to comply with all terms and specifications set forth therein.

C. Hold Harmless Provision. The Contractor shall indemnify, defend, and hold harmless the District, its engineer, agents, and employees from any and all claims, demands, actions, and/or liabilities of every kind and nature as may be made and/or entered against the Districts, its engineer, their agents, and employees by reason of, or arising out of, the acts or omissions of the Contractor, its agents, or employees, including costs and attorney's fees incurred by the Districts and its agents and representatives in investigating and defending against any such claims in the event of failure of the Contractor to so defend as herein required.

D. Prevailing Wages. Concerning the work called for herein, the Contractor agrees to pay hourly wages to its laborers and workers in accordance with Washington law and specifically in accordance with RCW 39.12.020 dealing with the prevailing rates to be paid on public-works projects. The Contractor represents it is fully knowledgeable concerning the terms of RCW 39.12.020. The first invoice cannot be paid until the District has received the approved Intent to Pay Prevailing Wages. Retainage shall be 5% of each

invoice. Retainage cannot be released until the Affidavit of Wages Paid is approved by the State and the Department of Revenue has approved the release of funds.

E. Performance of Work. The Contractor shall perform all work in a good, workmanlike and timely fashion. All materials used by the Contractor in its work shall be of a good or superior quality. In performing its work, the Contractor shall also act in accordance with all applicable local, state, and federal laws and regulations.

F. Warranty. The Contractor represents and warrants that all services and materials used by it in its services for the District shall be completely free of defects for a period of time lasting two (2) years from the date of completion. In the event any defects are discovered within the warranty time concerning the Contractor's services or materials used by it, the Contractor shall promptly cure any said defects.

G. Non-assignment of Obligations. The contractor is hereby prohibited from assigning or in any manner transferring its obligations under this contract to any third party or entity. The Contractor shall be personally responsible for performance of all work and obligations placed upon it hereunder. The person in charge of the Contractor's work hereunder shall be \_\_\_\_\_, and he/she shall make him or herself available to the District representative at all reasonable time for consultation.

H. District Inspection. Prior to commencing its work, the Contractor shall meet with the District representative(s) and these parties shall set forth an inspection schedule to be followed by the District in inspecting the Contractor's work while it is in progress. The contractor shall promptly report to the District, in writing, all errors and omissions it commits in performing the work.

5. Risk of Loss. Until the Contractor's work for the District has been fully completed and accepted by the District, all risk of loss concerning the project shall be borne by the Contractor.

6. Cooperation of Parties. The parties shall strive at all times to cooperate with one another in good faith so the terms and spirit of this agreement may be carried out in a good and timely manner.

7. Legal Action. In the event either party employs an attorney to enforce or defend any claim or cause of action arising out of or relating to this agreement, or any appeal therefrom, then and in any such event, the prevailing party shall be entitled to recover from

the losing party, and the losing party shall pay, all of the prevailing parties reasonable costs and attorney fees therein incurred. The venue and jurisdiction for any such action shall lie with the appropriate court in Kitsap County, Washington.

8. Complete Agreement. This agreement constitutes the full and complete agreement between the parties concerning the matters set forth herein. There are no other agreements, either written or verbal, in existence.

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

WEST SOUND UTILITY DISTRICT:

\_\_\_\_\_  
Michael Wilson, General Manager

CONTRACTOR:

\_\_\_\_\_  
Corporate Representative

On this day personally appeared before me \_\_\_\_\_,  
who stated that (s)he is the \_\_\_\_\_ or \_\_\_\_\_, a  
corporation, and that the instrument was signed on behalf of such corporation by authority  
of its board of directors and acknowledged such instrument to be its voluntary act and deed.

Given under my hand and official seal this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_

**ENGINEERS ESTIMATE**

**Schedule of Bid Prices**

SKWRF Storage Building

Bid Item	Standard Item Description	QUANTITY	Unit of Measure	UNIT PRICE	AMOUNT
1	Item 1- Mobilization (Max. 8%)	1	Each	Lump Sum	
2	Item 2- Interior Slab	1	Each	Lump Sum	\$17,000
3	Item 3- Cement Masonry Units	1	Each	Lump Sum	\$55,200
4	Item 4- Roof Structure & Associated	1	Each	Lump Sum	\$40,100
5	Item 5- Wallboard & Associated	1	Each	Lump Sum	\$7,750
6	Item 6- Doors & Associated	1	Each	Lump Sum	\$14,400
7	Item 7- Demobilization	1	Each	Lump Sum	
8					
9					
10					
11					
12					
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14					
15					
16					
17					
18					
19					
20					

ESTIMATED  
TOTAL      \$134,450

## Attachment "A"

### SCHEDULE OF BID PRICES

CONTRACTOR \_\_\_\_\_

DATE \_\_\_\_\_

	DESCRIPTION	QTY.	ITEM PRICE	UNITS	BID PRICE
1.	Item 1. Mobilization (not to exceed 8% of total bid submitted)	1	LS	Each	
2.	Item 2. Interior Slab & Associated as per plans and specifications	1	LS	Each	
3.	Item 3. Cement Masonry Units & Associated as per plans and specifications.	1	LS	Each	
4.	Item 4. Roof Structure & Associated as per plans and specifications.	1	LS	Each	
5.	Item 5. Gypsum Wallboard & Associated per plans and specifications.	1	LS	Each	
6.	Item 6. Doors & Associated per plans and specifications.	1	LS	Each	
7.	Item 7. Demobilization	1	LS	Each	
8.					

Estimated Start Date \_\_\_\_\_

Bid Total \_\_\_\_\_

Estimated Completion Date \_\_\_\_\_

Signature \_\_\_\_\_

**Bids are due to the District by 3/28/2017 11:00 AM.**

**VIA MAIL OR HAND DELIVERY TO THE FRONT DESK ONLY TO:**

**West Sound Utility District  
 SKWRF Storage Building  
 ATTN: Michael Wilson  
 2924 SE Lund Ave  
 Port Orchard, WA 98366**

*The Bid Price Does Not Include State Sales Tax*

## GENERAL PROVISIONS

**TIME FOR COMMENCEMENT AND COMPLETION:** The Contractor shall notify the District of the time of commencement of his work and the work shall be commenced and completed as set forth in the Contract.

**CLAIMS FOR DAMAGE:** The Contractor shall not be entitled to any claim for damages on account of hindrance or delays from any cause whatsoever; but if occasioned by causes beyond the control of the Contractor, or by any act or omission on the part of the District, such act, hindrance, or delay may entitle the Contractor to an extension of time in which to complete the work, provided that the Contractor gives notice in writing stating the cause of such act, hindrance or delay within two (2) days after its occurrence.

**CONTRACTORS INSURANCE:** The Contractor shall not commence work under this contract until he has obtained all insurance required under this paragraph and such insurance has been approved by the District, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved.

a. The contractor shall obtain and keep in force during the term of the contract, Commercial General Liability insurance policies with insurance companies which have an A.M. Best's rating of A: VII or better and who are approved by the Insurance Commissioner of the State of Washington pursuant to Title 48 RCW.

b. Prior to the execution of the contract, the contractor shall purchase and maintain during the term of this project a Commercial General Liability insurance policy meeting the requirements set forth herein. The Contractor shall file with the district either a certified copy of all policies with endorsements attached, or a certificate of insurance with endorsements attached as are necessary to comply with these specifications. Failure of the Contractor to fully comply with the requirements regarding insurance will be considered a material breach of contract and shall be cause for immediate termination of the contract and of any and all district obligations, regarding same.

c. The Contractor shall not begin work under the contract or under any special condition until all required insurances have been obtained and until such insurances have been approved by the District. The insurance shall provide coverage for the Contractor, the Contractor's subcontractors and the District. The coverage so provided shall protect against claims from bodily injuries, including accidental death, as well as claims for property damage which may arise from any act or omission of the Contractor, the Contractor's subcontractors, or by anyone directly or indirectly employed by either of them.

d. The insurance policies shall specifically name West Sound Utility District, its elected and appointed officials, officers, employees, agents and volunteers as insured with regards to damages and defense of claims arising from: (1) activities performed by or on behalf of the Contractor; (2) products and completed operations of the Contractor, and (3) premises owned, leased or used by the Contractor. The insurance shall be maintained in full force and effect at the Contractor's expense throughout the term of the contract.

e. The District shall be given at least 30 written notice of cancellation, non-renewal, material reduction or modification of coverage. Such notice shall be by *certified mail* to the District.

f. The coverage provided by the Contractor's insurance policies shall be primary to any insurance maintained by the District, except as respects losses attributable to the sole negligence of the District. Any insurance that might cover this contract which is maintained by the District shall be in excess of the Contractor's insurance and shall not contribute with the Contractor's insurances.

g. The Contractor's insurance policies shall protect each insured in the same manner as though a separate policy had been issued to each. The inclusion of more than one insured shall not affect the rights of any insured as respects any claim, suit or judgment made or brought by or for any other insured or by or for any employee of any other insured. However this provision shall not increase the limits of the insurer's liability.

h. The General Aggregate provision of the contractor's insurance policies shall be amended to show that the General Aggregate Limit of the policies applies separately to this project.

i. The Contractor's insurance policies shall not contain deductibles or self-insured retentions in excess of \$10,000 unless approved by the District

j. The Contractor's insurance policies shall contain a provision that the district has no obligation to report events which might give rise to a claim until a claim has been filed with the Board of Commissioners of West Sound Utility District.

k. Types and Limits of Insurance Required:

**Commercial General Liability**

- \$1,000,000 each occurrence Bodily Injury and Property Damage liability
- \$2,000,000 annual aggregate
- Employees and volunteers as Additional Insureds
- Premises and operations
- Broad form property damage including underground, explosion and collapse hazards (XCU)
- Products completed operations
- Blanket contractual
- Subcontractors
- Personal injury with employee exclusion deleted
- Employers liability (Stop gap)

**Automobile Liability**

- \$1,000,000 per accident bodily injury and property damage liability, including
- Any owned automobile
- Hired automobiles
- Non-owned automobile

l. As an alternative to the above indicated Commercial General Liability insurance policy



the Contractor may provide the District with an Owners and Contractors Protective (OCP) policy with a limit of coverage of \$5,000,000. **If the contractor provides an OCP policy, the contractor shall additionally provide the Purchaser with evidence that the contractor's Commercial General Liability policy has been endorsed adding the district, it's elected and appointed officials, officers, employees, agents and volunteers as insured for at least products completed operations coverage.**

m. Providing of coverage in the stated amounts shall not be construed to relieve the Contractor from liability in excess of such limits.

n. The Contractor shall have its insurance agent/representative complete the Insurance Coverage Questionnaire contained in the proposal and attach it to the certificate of insurance for District's approval.

o. The Contractor shall maintain Workers Compensation insurance as required by state or federal statute for all of the contractor's employees to be engaged in work on the project under this contract and, in case any such work is sublet, the contractor shall require the subcontractor similarly to provide workers compensation insurance. The Contractor's Department of Labor & Industries account number shall be noted on the certificate of insurance. In the event any class of employees engaged in the work under this contract is not covered under Workers Compensation insurance as required by state and federal statute, the Contractor shall maintain and cause each subcontractor to maintain, Employers Liability insurance for limits of at least \$1,000,000 for each employee for disease or accident, and shall furnish the District with satisfactory evidence of such. The Contractor shall be solely and completely responsible for safety and safety conditions on the job site, including the safety of all persons and property during performance of the work. The services of District's employees or the engineer's personnel in conducting construction review of the Contractor's performance is not intended to include review of the adequacy of the contractor's work methods, equipment, bracing, scaffolding, or trenching, or safety measures in, on, or near the construction site. The Contractor shall provide safe access for the District and its inspectors to adequately inspect the quality of work and the conformance with project specifications.

q. The Contractor shall be solely and completely responsible to perform all work and furnish all materials in strict compliance with all applicable state, city, county and federal laws, regulations, ordinances, orders and codes. The Contractor's attention is directed to the requirements of the Washington Industrial Safety and Health Act (WISHA), Chapter 49.17 RCW.

r. The District will make no progress payments until the Contractor has fully complied with this section. This remedy is not exclusive and the District may take such other action as is available under other provisions of this contract, or otherwise in law.

s. The contractual coverage of the Contractor's policy shall be sufficiently broad enough to insure the provisions of the HOLD HARMLESS AND INDEMNIFICATION AGREEMENT of this contract.

t. Nothing contained in these insurance requirements shall be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from the Contractor's operations under this contract.

**PAYMENTS:** The Contractor shall submit an invoice to the District at completion of the project. Payments will be made no later than thirty (30) calendar days upon acceptance and District approval of the Contractor's invoice.

The first payment cannot be made until the Contractor submits the Intent to Pay Prevailing Wages, as approved by the State Department of Labor and Industries, to the District.

a. Retention of Public Works Contracts: Five percent (5%) of all monies earned by the Contractor on estimates during the progress of the work shall be retained by the District. Said funds shall not be released until the expiration date of thirty (30) days after the acceptance of the completed contract and the receipt of a certificate from the proper authorities. The Contractor shall certify that there are no unsatisfied liens against the fund. Certificates shall be obtained from the State Tax Commission, and any suppliers of labor, material, or equipment as requested by the District.

Prior to release of retainage, the Contractor shall provide the following:

1. Affidavit of Wages Paid from Department of Labor
2. Certificate from the Department of Revenue that all taxes and penalties are paid.
3. Certificate from Contractor that all suppliers and subcontractors have been paid and that there are no liens against the project.

**INTERPRETATIONS OF DOCUMENTS:** The documents forming the contract are complementary, and what is called for in one shall be binding as if it were called for by all. They are intended to include all detail of labor and material reasonably necessary for the proper execution of the work. Should there be any discrepancy between the specifications and plans, the specifications shall have precedence.

**CONFORMITY TO PLANS AND SPECIFICATIONS:** The work shall be done in strict conformity to the plans and specifications.

**LABOR AND MATERIALS:**

The intent of the plans and specifications is to provide for the construction and completion of every detail of the work described therein. It is understood that the Contractor for all and any part will furnish all labor and materials, tools, equipment, transportation, and necessary supplies, such as may be reasonably required to execute the contract in a satisfactory and workmanlike manner in accordance with the plans, specifications, and terms of the contract.

a. Unless otherwise specified, all materials shall be new. All materials shall be one of the several kinds called for; as it is intended that only the best methods and materials, as recognized by usage in first-class work, shall be used. All workmanship shall be of the highest quality.

**PROTECTION OF LIFE AND PROPERTY, AND INDEMNITY AGREEMENT:**

a. Responsibility for the protection of the work, the workers, all public utilities, the public at large, and traffic in general against damage and injury chargeable to the construction or any circumstances, conditions, or negligence in connection therewith, shall rest with the Contractor and he shall be liable therefore. The Contractor shall erect and maintain good and sufficient guards, barricades, signs, lights, and signals at all unsafe places at or near the work, and shall do all other things necessary to prevent accident or loss of any kind as a result of his operations.

b. The Contractor covenants that he will indemnify the District from any loss, damage, cost, charge, or expense whether to persons or property to which the District may have been put by reason of any act, action, neglect, omission, or default on the part of the Contractor. The Contractor hereby covenants to assume the defense thereof and to pay any and all judgments that may be incurred by or obtained against the District.

**SITE PREPARATION:** All preparations necessary to expedite completion of the work are the responsibility of the Contractor.

**SUPERINTENDENCE:** The Contractor, during the progress of work, shall keep a competent representative on the work site at all times. Said representative shall be designated in writing to the District and shall be fully responsible for decisions. Should such representative have cause to be absent from the job for a period greater than four (4) hours, he shall designate an assistant and so inform the District. The Contractor's representative shall have full authority to make all decisions on behalf of the Contractor and bind the Contractor to all said decisions as the work progresses; and that the representative's designee, in his absence, shall have the same authority.

**CHANGES IN WORK AND EXTRA WORK:** The right is reserved without impairing the contract, to order the performance of such extra work of a class not contemplated in the proposal, as may be considered necessary to complete fully and satisfactorily the work included in the contract. Such changes and extra work shall be done in accordance with the Contract Documents insofar as the contract documents are applicable and shall be paid for as provided for herein. Payments for extra work will be made at unit price bid, if applicable, or at cost plus fifteen percent (15%). The Contractor shall not commence or perform any extra work for which he expects extra compensation until such work has been ordered in writing by the Purchaser. All claims for extra work must be approved by the District in writing at the completion of such work.

**CONTRACTOR RESPONSIBILITY FOR WORK DONE:** The Contractor shall furnish for the price bid all skill, labor, and materials required for the complete performance of the contract, and shall fully complete the work in accordance with the plans and specifications. He shall be responsible for the entire contract and shall maintain the same during construction and until final acceptance of the entire improvement by the District. He shall also replace and make good any and all defective materials or workmanship in any part of the work or equipment covered by this contract if discovered within one (1) year following acceptance of the work. The performance bond furnished shall guarantee such replacement and repair and shall save harmless and indemnify the District from such defective materials or workmanship for a period of one (1) year following the acceptance of the work.

**ASSIGNMENT OF CONTRACT AND SUBLETTING:**

- a. The Contractor shall not assign this contract or any part thereof, or monies due or to become due thereunder without the prior written approval of the District. The Contractor shall not sublet any part of this contract without having first obtained the written consent of the District to do so. In case such consent is given, it shall in no way release the Contractor from any responsibility, but he shall be held in all respects accountable for the same as if no consent had been given. The Contractor will be required to give his personal attention to the work which is sublet.
- b. The approval by the District of the award of a subcontract shall not create any contractual relations between the subcontractor and the District. The Contractor shall bind

the subcontractors to the terms and conditions of the contract documents insofar as the terms thereof may control the work included in the subcontract. No award of a subcontract to any subcontractor who, in the judgment of the District, is incompetent or unfit, will be approved by the District.

**VERIFICATION OF SUBCONTRACTOR RESPONSIBILITY:** In accordance with RCW 39.06.02, the Contractor must have verified the responsibility criteria for each first tier subcontractor, and a subcontractor of any tier that hires other subcontractors must verify responsibility criteria for each of its subcontractors. Verification shall include that each subcontractor, at the time of subcontract execution, meets the responsibility criteria listed in RCW 39.04.350(1) and possess an electrical contractor license, if required by Chapter 19.28 RCW, or an elevator contractor license, if required by Chapter 70.87 RCW.

**CLEANING UP:** From time to time as may be ordered by the District, the Contractor shall, at his own expense, clean up and remove all refuse and unused materials of any kind resulting from the work. If such work is not performed within twenty-four (24) hours after receipt of notice from the District, the work may be done by the District and the cost thereof charged to the Contractor and deducted from the final contract sum due him.

The Contractor shall leave the premises in a clean and orderly condition on fulfilling the contract.

**TERMINATION FOR BREACH:** Should the Contractor, at any time, refuse, or neglect to supply a sufficient number of properly skilled workmen or of materials of the proper quality, or fail in any respect to prosecute the work with promptness and diligence, or fail in the performance of any of the agreements therein contained, the District may, at its option and after giving ten (10) days' notice in writing to the Contractor, provide such sufficiency of labor or materials and deduct the cost thereof from any monies due or thereafter to become due under this contract.

In the event of such refusal, neglect or failure, or if the Contractor abandons the work undertaken under this contract, the District may, at its option, transfer the employment for said work from the Contractor to the surety. Written notice of such transfer of employment shall be given to the Contractor and to his surety or his surety's representative, except that no notice need be given a Contractor who has abandoned work. Upon receipt of such notice, such surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the work included under this contract and employ, by contract or otherwise, any person or persons to finish the work and provide the materials therefore, without termination of the continuing full force and effect of this contract. In case of such transfer of employment to such surety, that surety shall be paid in its own name on estimates covering work subsequently performed under the terms on this contract and according to the terms hereof without any right of the Contractor to make any claim for the same or any part thereof.

In lieu of the foregoing, if the District so elects, it may terminate the employment of the Contractor for said work and enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the work included under this contract and employ, by contract or otherwise, a person or persons to finish the work and provide the material therefore. In case of discontinuance of employment by the District as aforesaid, the Contractor shall not be entitled to receive any further balance of the amount to be paid under this contract until the work shall be fully finished, at which time, if the unpaid balance of the amount to be paid under this contract shall exceed the expenses incurred by the

District in finishing the work and all damages sustained or which may be sustained by the District by reason of such refusal, neglect, failure, or discontinuance of employment, such excess shall be paid by the District to the Contractor and his surety. However, if such costs exceed the amount of the unpaid balance to be paid under this contract, the Contractor and his surety shall be jointly and severally liable therefore to the District and shall pass the difference to the District.

**DEFAULT:** Either party shall be deemed in default under the terms of this Contract if it violates any of the substantive terms hereof, with the violation remaining in effect twenty days after receiving written notice from the non-defaulting party of the breach and a demand that it be cured; **PROVIDED HOWEVER,** a reasonable number of days in addition to the twenty day cure period, not to exceed an additional twenty days, shall be granted to cure a default, if the party in default is diligently striving to cure the default from the date it receives the notice, and if the default cannot be reasonably cured within the initial twenty day time period through due diligence and the resources then available to the defaulting party.

All notices called for herein shall be in writing and remitted to the District in care of General Manager, at the following address, West Sound Utility District, 2924 SE Lund Avenue, Port Orchard, Washington 98366, and to the Contractor, at the address provided in Section 3, PROPOSAL of this contract, by certified mail, return receipt requested. Notices shall be deemed received three days after mailed through the U.S. mails in the Western United States. If either party becomes in default of this Agreement, the non-defaulting party shall have all remedies available to it at law and in equity. The party who substantially prevails in any court action shall also be entitled to receive from the party who substantially loses all of its reasonable attorney fees and costs in pursuing the action.

**SCOPE OF PLANS AND SPECIFICATIONS:** It is the intent of these specifications to describe the project complete in every respect. Any work that may have been accidentally implied shall be furnished by the Contractor the same as if it had been specifically stated. In accepting this contract, he shall assume responsibility for methods of performing and installing the work.

**PREVAILING WAGES:** The Contractor agrees that the hourly minimum rate of wage which may be paid to laborers, workmen, or mechanics in each trade or occupation required by the Contractor, subcontractor, or other person doing or contracting to do the whole or any part of said work, shall not be less than the prevailing rate of wage.

The Contractor further agrees to comply with the provisions of RCW. 39.12, and in particular, to comply with the procedure for complying with said laws as set forth in the Information Bulletin dated July 19, 1965, revised January 1966 as issued by the Department of Labor and Industries of the State of Washington and any amendment or supplements thereto.

The Contractor, on or before the date of commencement of work, shall file a certificate and statement, verified by oath by the Contractor or subcontractor as the case may be, that he has read such a statement and certificate subscribed by him and knows the contents thereof, and that the same is true of his knowledge, said certificate and statement to be filed with the District and with the Director of Labor and Industries certifying the rate of hourly wage paid and to be paid each classification of laborers, workmen, or mechanics employed upon the work by the Contractor or subcontractor, which shall not be less than the prevailing rate of wage. Such statement and any supplemental statements which may be necessary shall be filed in accordance with the practices and procedures required by the Department of Labor and Industries.

In case any dispute arises as to what are the prevailing rates of wage for work of a similar nature and such dispute cannot be adjusted by the parties in interest, including labor and management representatives, the matter shall be referred for arbitration to the Director of the Department of Labor and Industries of the State of Washington, and his decision therein shall be final and conclusive and binding on all persons involved in the dispute.

The District retains the right to audit the Contractor's records.

### **GENERAL SPECIFICATIONS**

**PERMITS:** Owner has obtained all necessary permits and will coordinate with contractor for scheduling inspections.

**TAXES:** The Contract Sum and any agreed variations therefrom shall include all Federal, State, and local taxes imposed by law, except for the Washington State Sales Tax, which shall be shown separately from the contract sum.

**MATERIALS:** All materials called for shall be erected or applied in accordance with the manufacturer's instructions.

**TYPICAL DETAILS:** Where details are shown covering "special conditions", these details also apply to all "similar conditions" not specifically detailed.

**PUBLIC SAFETY:** The general contractor shall be responsible for his subcontractors in all respects insofar as this project is concerned. The Contractor shall be responsible for the erection and maintenance of good and sufficient guards, barricades, signs, lights, and signals at all unsafe places at or near the work, as set forth in the general specifications and in such a manner that access to all stores and other businesses affected shall not be impaired. The District's desires in this matter shall be followed.

**USE AND OCCUPANCY:** As much as possible, access to the District facilities shall not be interfered with and the Contractor shall cooperate in making this possible.

**EXPEDITING OF WORK:** The Contractor shall be responsible for expediting all phases of the work. Maintenance of all construction schedules as submitted by the Contractor is most important for completion of the job on time.

## **INTENT**

The intent of this request for proposals is to provide for supply and installation of materials and labor for the completion of a Storage Building at the South Kitsap Water Reclamation Facility.

## **LOCATION**

The South Kitsap Water Reclamation Facility is located in Port Orchard, Washington, near the intersection of Olney Avenue and Beach Drive. Location- Section 25, Township 24N Range 1E. Physical site address: 1165 Beach Drive East, Port Orchard, WA 98366.

## **GENERAL INFORMATION**

The skill and experience of the Contractor are important considerations in this contract. The Owner will consider the experience and equipment of each bidder in selecting the successful Contractor. Only competent workmen shall be employed on the project and at least two people shall be on the job at all times unless otherwise specified. Prompt compliance is also important to the Owner. Bidders shall state their estimated start and completion times on the Schedule of Bid Prices. After award of the bid, the selected Contractor will need to provide a defined demolition date to assist in coordination of engineering oversight Preference may be given to bidders capable of timely project completion. The District desires completion of this project no later than 9/30/2017.

The selected Contractor shall furnish all labor, equipment, and materials to complete the project in accordance with these specifications and requirements identified within this document and attached specifications.

The Contractor should be aware that the site is fenced, but that the Owner does not warrant the site secure, and assumes no responsibility for any equipment or supplies lost, stolen, or damaged.

The Contractor shall take full responsibility for any tools or equipment. The Contractor shall receive no payment for time and material for lost tools or equipment and no compensation for replacement of equipment or loss of time.

The Owner will provide a site large enough for project operations, storage, electrical power, restroom facilities and potable water if needed.

The Contractor must verify all potential conflicts before staging equipment or beginning daily operations. Any materials, supplies or equipment must not interfere with plant operations.

## **SCOPE**

Section covers furnishing all labor, materials, and equipment necessary to perform all work necessary to complete a storage building at the South Kitsap Water Reclamation Facility per the plans and specifications. A portion of this project is completed. The completed portion consists of:

- Site Development
- Piling Installation
- Footings
- Foundation Walls
- Foundation Waterproofing
- Building Drain
- Drains to receive downspouts
- Drain Rock and Backfill
- Relocation of Waste Gas Flare

Note:

- Electrical work identified on the plans is the responsibility of the owner.
- Any required work outside of the building envelope identified on the plans is the responsibility of the owner.

### **Item 1. MOBILIZATION**

This Item shall include purchase of Contract bonds; transportation of personnel, equipment, and operating supplies to the site; and other preparatory work necessary to conduct required operations. Bid Item 1 will include mobilization for work on the SKWRF Storage Building.

This Item includes cleaning during construction. During execution of the work, the Contractor will avoid contamination of the project area; daily clean the site and dispose of waste materials, debris, and rubbish to assure the area is maintained free from accumulation of these items. The Contractor shall conduct operations and activities in such a manner as to prevent excessive interference of daily activities of the facility.

Payment for Item 1 shall be made at the lump sum price bid upon initiation of work pursuant to the requirements of the State of Washington Department of Labor and Industries (Approval of intent to pay prevailing wage).

### **ITEM 2. INTERIOR SLAB**

This includes all materials and labor necessary to complete installation of the interior slab as defined by plans and specifications. Inclusive of but not limited to:

1. Supply of sand for establishing interior grade
2. Compaction
3. Vapor barrier
4. All defined rebar, dowels, expansion joints, joint fillers, etc.
5. Concrete

Payment for Item 2 shall be made at the lump sum price bid upon completion of slab as defined by the plans and specifications.



### **ITEM 3. CEMENT MASONRY UNITS**

This includes all materials and labor necessary to complete installation of CMU walls as defined by plans and specifications. Inclusive of but not limited to:

1. Setting of CMU
2. Rebar
3. Anchor bolts
4. Grout Fill
5. Insulation
6. Waterproofing

Payment for Item 3 shall be made at the lump sum price bid upon completion of CMU as defined by the plans and specifications.

### **ITEM 4. ROOF STRUCTURE, ROOFING, GUTTERS, DOWN SPOUTS**

This includes all materials and labor necessary to complete installation of roof structure and assemblies, associated connections, and all required sheet metal as defined in the plans and specifications. Inclusive of but not limited to:

1. Trusses
2. Sill plates
3. Sealants
4. Blocking
5. Sheathing
6. Clips and screws
7. Soffit vents
8. Flashing
9. Standing seam panels
10. Gutters and downspouts

Payment for Item 4 shall be made at the lump sum price bid upon completion of roof structure complete as defined by the plans and specifications.

### **ITEM 5. GYPSUM WALLBOARD, INSULATION, AND PAINTING**

This includes all materials and labor necessary to complete installation of the specified gypsum wallboard, insulation, painting and associated trim as defined in the plans and specifications.

Inclusive of but not limited to:

1. Gypsum Wallboard
2. Screws
3. Joint tape
4. Joint Compound
5. Wood trim
6. Insulation
7. Baffles
8. Paint

Payment for Item 5 shall be made at the lump sum price bid upon completion of gypsum

wallboard, trim boards, insulation, and painting as defined by the plans and specifications.

#### **ITEM 6. DOORS, FAN AND LOUVERS**

This includes all materials and labor necessary to complete installation of the specified doors, fans, and louvers and associated hardware as defined in the plans and specifications. Inclusive of but not limited to:

1. Man door
2. Rolling door
3. Exhaust Ventilation Fan and grate
4. Inlet lovers and grate

Payment for Item 6 shall be made at the lump sum price bid upon completion of installation of doors, fan, grates, and louvers as defined by the plans and specifications.

#### **ITEM 7. DEMOBILIZATION**

This Item shall include removal of all equipment, materials, and temporary equipment installed during mobilization. Demobilization and site restoration shall include but not limited to complete site cleanup after construction.

Payment for Item 7 will be paid according to the lump sum bid price. Payment will not be made until the site restoration has been approved by the owner.

#### **SPECIFICATIONS**

##### **GENERAL:**

This section covers furnishing all labor, materials, and equipment for providing a structure which is completely weather-tight.

##### **CAULKING:**

Caulk all joints and spaces necessary to provide a completely weather-tight product. Apply caulking in strict accordance with manufacturer's directions. Assure that all surfaces to be sealed are clean of dust, oil, dirt, form-releasing or concrete-curing agents, and water. Where necessary to provide a suitable backstop and bond breaker, tightly pack with polyethylene foam. Rope the back of grooves, leaving a minimum depth of 1/4 inch for sealant. Prime surfaces as recommended by manufacturer.

Apply caulking with gun using nozzle of correct size for joint, forced into grooves with sufficient pressure to expel all air and completely fill groove. Finish cured caulking uniformly and flush with adjoining surfaces. Seal around entire perimeter of openings. Do not apply sealant to wet or frosted surface.

Apply silicone sealant at temperature above 45 degrees Fahrenheit. Clean all adjoining surfaces of excess sealant, smears, or marking due to application and leave joints with neat, uniformly-filled surfaces.

## **FLOOR VAPOR BARRIER**

The concrete flooring shall be poured over a polyethylene film. Film shall be at least 10 mils thick, uniform in appearance, and free from defects. Overlap joints a minimum of 12 inches, and seal continuously. Cover with a minimum 2 inches of sand to protect from damage. Repair punctures and tears prior to placing concrete.

## **CEILING INSULATION**

Provide and install ceiling insulation as shown on the project plans. Insulation shall be kraft paper faced batt with a minimum R value of 30. Place insulation with kraft paper face down and as recommended by the manufacturer. Insulation shall be placed to the extents possible to cover the attic. Place baffles above the insulation as the slope of the roof meets the building edge. Ceiling insulation shall be equal to Owens Corning.

## **GENERAL-CONCRETE MASONRY UNITS (CMU)**

This section covers that work necessary for furnishing and installing all masonry as described in these specifications and as shown on the plans.

Materials, design, construction and quality of masonry shall comply with *Chapter 21 Masonry* of the latest edition of the IBC.

### **CMU**

Concrete Masonry Units shall be hollow load-bearing type, conforming to ASTM C-90, Grade N, Type 1. All units, unless otherwise noted, shall have normal weight aggregate having a uniform quality, texture, and color. All blocks shall be covered and protected against wetting prior to use. Unit sizes and shapes shall be 8 inches high by 16 inches long by 8 inches wide (nominal). Masonry bond shall be a running bond, unless otherwise shown on the construction drawings or noted in the specifications.

The Contractor shall not place concrete masonry units when the work area air temperature is below 40 degrees F. In addition, the Contractor shall protect his work from freezing for a period of 48 hours following the time the blocks have been laid. The masonry construction shall be protected from direct exposure to sun when erected in an ambient air temperature of 90 degrees F as measured in the shade with the relative humidity less than 50 percent. All ungrouted concrete masonry units with an exterior face shall be insulated.

All concrete masonry units exposed to weather shall have an integral water repellent added to the block and mortar. Repellent admixture equal to Dry-Block as manufactured by W.R. Grace and Co.

In lieu of water repellent admixture, coat exterior walls as specified:

- Surface preparation – Clean and dry free of contaminants
- One coat DuraPell 40 – 100 square feet/ gallon
- Saturate Vertical surfaces with a 6” rundown

The Contractor shall lay only dry masonry units. When masonry needs to be sawed, only masonry saws shall be used to cut and fit masonry units. All units shall be set plumb, true to line, and with level courses accurately spaced. The masonry unit shall be adjusted to final position while the mortar is soft and plastic. If the units are displaced after the mortar has stiffened, the Contractor shall remove the units, clean the joints or mortar, and relay with fresh and clean units.

When joining fresh masonry to set or partially set masonry construction, the Contractor shall clean the exposed surface of set masonry and remove loose mortar prior to laying fresh masonry. CMU units shall be laid with full mortar coverage on horizontal and vertical face shells and webs. All joints shall have a nominal thickness of 3/8-inch and shall be uniform in nature. Lay at least 50 percent of the units at intersection in masonry bond. All joints shall be tooled and concave. The Contractor shall remove mortar protruding into cells of cavities to be reinforced.

Grout-fill all vertical and horizontal cells that contain reinforcing and as detailed on the construction drawings. Grouted Masonry shall meet the requirements of the latest edition of the IBC as a minimum. Cells shall have an unobstructed vertical alignment. The Contractor shall provide grouted bond beams where required. Provide lintels made up of reinforced, grouted lintel sections over all wall openings 12 inches or wider. The Contractor shall install horizontal and vertical reinforcing and hold in position as the work progresses to maintain the following clearance between the reinforcing and the block surface: 1 1/2 exterior, 3/4-inch interior.

The maximum lift for grout pours shall be 4 feet. Grout placed shall be vibrated in accordance with the requirements of the latest edition of the IBC and these specifications. The Contractor shall make sure that the grout is consolidated with a vibrator immediately after pouring and re-consolidate after excess moisture has been absorbed; but before plasticity is lost. Provide clean-outs at the bottom of all grouted courses. Contractor may eliminate clean-outs at the Owner's discretion if the bottom of all cells are free of knocked-off mortar fins and dirt.

The top course of any masonry wall shall consist of a bond beam of solid masonry. The Contractor shall grout full-space-around door frames and other built-in items. Build in all work with the masonry including anchor bolts. Build in wall plugs, doors and accessories as erection progresses. The Contractor shall hold grout 1-1/2 inches below the top of the upper most unit when work stops for over one hour, and thoroughly clean and roughen the joint before proceeding with the work.

Provide vertical reinforcement at all corners, on each side of openings larger than 8-inches and at the intervals shown. Provide horizontal reinforcing at bond beams as shown on the drawings, and above and below all openings larger than 8-inches. All reinforcing shall be lap spliced 24-inches minimum to provide continuous reinforcement.

The Contractor shall protect the adjoining work from mortar droppings, and newly-laid masonry from damage and from rain until the mortar has set. At the stoppage of work at any time, the work shall be covered with tarpaulins or boards to prevent rain or snow from entering the cores of the block. The walls shall be adequately braced to support masonry.

The Contractor shall protect sills, ledges, and offsets from mortar drippings or other damage during construction. If mortar or grout has been misplaced, the Contractor shall have it immediately removed. Shore reinforced lintels a minimum of 14 days after grout placement or until a 28-day strength is achieved.

Prior to completion, fill all holes in joints. All defective joints shall be cut out and repointed. At the end of each day's work and after final pointing, dry-brush the masonry surface.

**TOLERANCES:**

Variations from plumb, specified grade, conspicuous lines, and walls shall be plus or minus ¼ inch in any 10-foot length, not to exceed plus or minus 1 inch overall.

Variations from dimension shall not exceed plus or minus ½ inch.

**MASONRY PATTERNS AND COLORS:**

Masonry construction shall match the existing masonry in color and pattern.

Exterior face of CMU shall be smooth face with single 3/8" X 3/8" vertical score.

Interior masonry surfaces shall be smooth face. Mortar color shall match existing mortar.

**MASONRY MORTAR:**

Masonry mortar shall be used to properly level, position, bond together, seal irregularities, and provide a weather-tight joint between the concrete masonry units.

Stockpile and handle aggregates to prevent contamination from foreign materials; store admixtures to prevent contamination or damage from excessive temperature changes; and keep water free from all foreign materials.

The Contractor shall heat the mixing water when air temperature is below 40 degrees Fahrenheit (F) and heat aggregates when air temperature is below 32 degrees F to assure mortar temperature between 40 degrees F and 120 degrees F until used. The Contractor shall produce subsequent mortar batches within plus or minus 10 degrees F of the first batch. The water or sand shall not be heated above 120 degrees F.

Mortar shall be type "S", minimum compressive strength of 1800 psi at 28 days. Cement shall be ASTM C-150 and lime shall be ASTM C-207.

Proportion mortar by volume and mix in a standard mortar mixer operated in accordance with manufacturer's recommendations. Mix ingredients thoroughly in dry form and add water to bring the mixture to the proper consistency for use. Do not hand-mix mortar. The initial bed joint thickness shall not be less than ¼ inch or more than 1 inch. Provide mortar pigment to match color of concrete masonry units.

**MASONRY GROUT:**

Masonry grout shall be used to fill all CMU cells that contain reinforcing steel. Masonry grout shall comply with the following specifications:

1. ASTM C-150, Portland Cement
2. ASTM C-476, Mortar and Grout for Reinforced Masonry.
3. ASTM C-404, Aggregate for Masonry Grout.
4. Slump: 8" min to 12" max.

Grout shall be stockpiled to prevent contamination from foreign materials and the admixtures shall be stored to prevent contamination or damage from excess temperature change. Water to be used in mixing the grout shall be free from foreign materials.

The masonry grout shall consist of one part Portland Cement to three parts masonry sand and one-tenth part lime per ASTM C-476 Fine Grout Standards. It shall have a minimum compressive strength of 2000 psi.

**MASONRY ACCESSORIES:**

The Contractor shall provide shop drawings showing all attached or embedded accessories.

Reinforcing steel bars to be used for masonry work shall be ASTM A-615, Grade 60. Provide bar lengths and sizes as shown on the construction drawings. Rebar placed shall meet the general conditions for tolerance as required by the latest edition of the IBC.

All masonry accessories shall be installed as shown on the construction drawings and submitted details. The Contractor shall not splice reinforcing except as shown on the construction drawings. The minimum splice, where not indicated, shall be 32 bar diameters or 24 inches, whichever is greater. All accessories shall be cleaned of all dirt, grease, oil, loose mill scale, excessive rust, or other foreign matter which may reduce bond with grout or mortar.

### **CMU INSULATION**

All non-grouted exterior exposed CMU walls shall be insulated with a foamed-in-place insulation that meets or exceeds both thermal and sound insulation requirements as stated below. Foamed-in-place insulation shall be PolyMaster R-501 Foam Insulation as Manufactured by PolyMaster, Inc. or approved equal.

Performance Requirements: The foamed-in-place insulation shall provide a minimum thermal insulation R-value of 11.0 (ASTM C1363) and a minimum sound transmission class (STC) of 44 (ASTM E413) on 8 inch CMU at 105 pcf.

The permeance shall not exceed 6.631 perms/inch and water vapor absorption shall not exceed 10% by volume at 24 hours, at 25 degrees F, at 100% relative humidity.

The insulation shall exhibit a flame spreading rate of 25 and smoke development of 40.

The building code surface burning classification shall be Class I or Class A.

The insulation shall be noncorrosive; contain no asbestos or glass fibers; produce no offgassing or odors; be formaldehyde and CFC free; and be biodegradable.

Installation: Insulation shall be installed by methods and personnel approved by the block manufacturer and in accordance with insulation manufacturer's recommendations. Install foam in CMU cores using pressure fill or top fill method to a uniform density.

Completely fill all spaces, crevices, and voids. If pressure fill method is used, fill and point drill holes in exposed or concealed masonry units with mortar after installation, shaping and texturing to match existing materials.

### **GENERAL- ROOFING, GUTTERS, SOFFITS FLASHINGS**

This section covers that work necessary for furnishing and installing roofing as described in these specifications and as shown on the plans.

#### **METAL ROOF PANEL MATERIALS ALUMINUM SHEET:**

Coil-coated sheet, ASTM B 209, alloy as standard with manufacturer, with temper as required to suit forming operations and structural performance required.

1. Alternate alloys include the following:

- a. Alclad Alloy 3003: H14, H16, H24, or H26 temper.
- b. Alclad Alloy 3004: H22, H24, H32, or H34 temper.
- c. Alloy 3105: H14 or H16 temper.
- d. Alloy 5005: H14, H16, H24, H26, H34, or H36 temper.

**EXPOSED FINISHES:**

1. High-Performance Organic Finish: Three-coat, thermocured system with fluoropolymer coats containing not less than 70 percent polyvinylidene fluoride resin by weight, with a minimum dry film thickness of 1.5 mil; complying with the physical properties and coating performance requirements of AAMA 2605, except as modified below:
  - a) Humidity Resistance: 2000 hours.
  - b) Salt Spray Resistance: 2000 Hours
2. Concealed Finish: White or light-colored acrylic or polyester backer finish.

**PANEL SEALANTS:**

1. Sealant Tape: Pressure-sensitive, gray polyisobutylene compound sealant tape with release-paper backing; 1/2 inch wide and 1/8 inch thick.
2. Joint Sealant: ASTM C 920; as recommended in writing by metal roof panel manufacturer.
3. Butyl-Rubber-Based, Solvent-Release Sealant: ASTM C 1311.
4. Type III (blankets with reflective membrane covering, Category 1 (membrane is a vapor retarder), Class A (membrane-faced surface with a flame-spread index of 25 or less).

**UNDERLAYMENT MATERIALS:**

Self-Adhering, Polyethylene-Faced Sheet: ASTM D 1970, 40 mils thick minimum, consisting of slip-resisting polyethylene-film reinforcing and top surface laminated to SBS-modified asphalt adhesive, with release-paper backing; cold applied.

**MISCELLANEOUS MATERIALS:**

1. Fasteners- Self-tapping screws, bolts, nuts, self-locking rivets and bolts, end-welded studs, and other suitable fasteners designed to withstand design loads.
2. Provide exposed fasteners with heads matching color of metal roof panels by means of plastic caps or factory-applied coating.
3. Fasteners for Roof Panels: Self-drilling or self-tapping 410 stainless or zinc-alloy steel hex washer head, with EPDM or neoprene sealing washer under heads of fasteners bearing on weather side of metal roof panels.
4. Fasteners for Flashing and Trim: Blind fasteners or self-drilling screws with hex washer head.
5. Blind Fasteners: High-strength aluminum or stainless-steel rivets.
6. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil dry film thickness per coat. Provide inert-type non-corrosive compound free of asbestos fibers, sulfur components, and other deleterious impurities.

**STANDING SEAM METAL ROOF PANELS:**

Provide factory-formed metal roof panels designed to be field assembled by lapping and interconnecting raised side edges of adjacent panels with joint type indicated and mechanically attaching panels to supports using clips in side laps.

Include clips, cleats, pressure plates, and accessories required for a weather-tight installation.

1. Aluminum Panels Systems: Comply with ASTM E 1637.
2. Integral-Standing-Seam Metal Roof Panels: Formed with integral ribs at panels edges and striations between ribs; designed for sequential installation be mechanically attaching panels to supports with concealed clips located under one side of panels and engaging opposite edge of adjacent panels, and snapping panels together.
3. Material: Aluminum sheet, 0.040 inch thick.
4. Exterior Finish: Fluoropolymer.
5. Color: Match as close as possible to existing metal roof panels.
6. Surface: Smooth, flat finish.
7. Clips: Floating to accommodate thermal movement; stainless steel, non-penetrating performance clips as recommended by manufacturer.
8. Panel Coverage: 16 inches.
9. Panel Height: 1 ¾ inches.
10. Uplift Rating: UL 580 test, Class 90.

#### **Metal Soffit Panels:**

Provide factory-formed metal soffit panels designed to be field assembled by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners in side laps. Include accessories required for weathertight installation.

1. V-Groove-Profile Metal Soffit Panels: Perforated panels formed with vertical panel edges and flat pan between panel edges; with v-grooves between panels.
2. Material: Aluminum sheet, 0.032 inch thick.
3. Exterior Finish: Fluoropolymer.
4. Color: Match as close as possible to existing metal soffit panels.
5. Venting: Use the “Full Vent” perforated-style panel.
6. Fasteners: Use manufacturer’s recommended fasteners.
7. Sealant: Factory applied within interlocking joint.

#### **Accessories:**

Provide components required for a complete metal roof panel assembly including trim, copings, fascias, corner units, ridge closures, clips, flashings, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels, unless otherwise indicated.

1. Closures: Provide closures at eaves and ridges, fabricated of same metal as metal roof panels.
2. Clips: Minimum 0.0625-inch- thick, stainless-steel panel clips designed to withstand negative-load requirements.
3. Cleats: Mechanically seamed cleats formed from minimum 0.0250-inch thick, stainless-steel or nylon-coated aluminum sheet.
4. Backing Plates: Provide metal backing plates to end panel splices, fabricated from material recommended by manufacturer.
5. Closure Strips: Closed-cell, expanded, cellular, rubber or crosslinked, polyolefin-foam or closed-cell laminated polyethylene; minimum 1-inch thick, flexible closure strips; cut or



remolded to match metal roof panel profile. Provide closure strips where indicated or necessary to ensure weathertight construction.

6. Flashing and Trim: Formed from 0.0179-inch- thick fabricated of same metal as metal roof panels. Provide flashing and trim as required to seal against weather and to provide finished appearance. Locations include eaves, rakes, corners, bases, framed openings, ridges, fasciae, and fillers. Finish flashing and trim with same finish system as adjacent metal roof panels.
7. Gutters: Formed from 0.0179-inch- thick fabricated of same metal as metal roof panels. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- long sections, sized according to SMACNA's "Architectural Sheet Metal Manual." Furnish gutter supports spaced 36 inches o.c., fabricated from same metal as gutters. Provide bronze, copper, or aluminum wire ball strainers at outlets. Finish gutters to match metal roof panels.
8. Downspouts: Formed from 0.0179-inch- thick fabricated of same metal as metal roof panels; in 10-foot- long sections complete with formed elbows and offsets. Finish downspouts to match metal roof panels.
9. Roof Curbs: Fabricated from 0.0478-inch- thick, fabricated of same metal as metal roof panels; with welded top box and bottom skirt, and integral full-length cricket. Fabricate curb subframing of minimum 0.0598-inch- (1.5-mm-) thick, angle-, C-, or Z-shaped steel sheet. Fabricate curb and subframing to withstand indicated loads, of size and height indicated. Finish roof curbs to match metal roof panels.

#### **Fabrication:**

Fabricate and finish metal roof panels and accessories at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements demonstrated by laboratory testing. Comply with indicated profiles and with dimensional and structural requirements.

1. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of panel.
2. Where indicated, fabricate metal roof panel joints with factory-installed captive gaskets or separator strips that provide a tight seal and prevent metal-to-metal contact, in a manner that will minimize noise from movements within panel assembly.
3. Sheet Metal Accessories: Fabricate flashing and trim to comply with recommendations in SMACNA's "Architectural Sheet Metal Manual" that apply to the design, dimensions, metal, and other characteristics of item indicated.
4. Protect mechanical and painted finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

#### **Underlayment Installation:**

Self-Adhering Sheet Underlayment: Install self-adhering sheet underlayment, wrinkle free, on roof sheathing under metal roof panels. Comply with temperature restrictions of underlayment manufacturer for installation; use primer rather than nails for installing underlayment at low

temperatures. Apply over entire roof, in shingle fashion to shed water, with end laps of not less than 6 inches staggered 24 inches between courses. Overlap side edges not less than 3-1/2 inches. Roll laps with roller. Cover underlayment within 14 days.

### **Metal Roof Panel Installation-General:**

Apply slip sheet over underlayment before installing metal roof panels.

Provide metal roof panels of full length from eave to ridge, unless otherwise indicated or restricted by shipping limitations. Anchor metal roof panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Field cutting of metal roof panels by torch is not permitted.
2. Rigidly fasten eave end of metal roof panels and allow ridge end free movement due to thermal expansion and contraction. Predrill panels.
3. Provide metal closures at peaks, rake edges, rake walls, and each side of ridge and hip caps.
4. Flash and seal metal roof panels with weather closures at eaves, rakes, and at perimeter of all openings. Fasten with self-tapping screws.
5. Locate panel splices over, but not attached to, structural supports. Stagger panel splices and end laps to avoid a four-panel lap splice condition.
6. Lap metal flashing over metal roof panels to allow moisture to run over and off the material.

### **Fasteners:**

1. Steel Roof Panels: Use stainless-steel fasteners for surfaces exposed to the exterior and galvanized steel fasteners for surfaces exposed to the interior.
2. Aluminum Roof Panels: Use aluminum or stainless-steel fasteners for surfaces exposed to the exterior and aluminum or galvanized steel fasteners for surfaces exposed to the interior.
3. Metal Protection: Where dissimilar metals will contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with bituminous coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal roof panel manufacturer.
4. Coat back side of aluminum roof panels with bituminous coating where roof panels will contact wood, ferrous metal, or cementitious construction.

### **Joint Sealers:**

Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal roof panel assemblies.

1. Seal metal roof panel end laps with double beads of tape or sealant, full width of panel. Seal side joints where recommended by metal roof panel manufacturer.
2. Prepare joints and apply sealants to comply with requirements of roof panel manufacturer.

### **Field Assembled Roof Panel Installation:**

Standing-Seam Metal Roof Panels: Fasten metal roof panels to supports with concealed clips at each standing-seam joint at location, spacing, and with fasteners recommended by manufacturer.

1. Install clips to supports with self-tapping fasteners.
2. Snap Joint: Nest standing seams and fasten together by interlocking and completely engaging factory-applied sealant.
3. Seamed Joint: Crimp standing seams with manufacturer-approved motorized seamer tool so clip, metal roof panel, and factory-applied sealant is completely engaged.

#### **Accessory Installation:**

Install accessories with positive anchorage to building and weathertight mounting and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal roof panel assembly including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
2. Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual."
3. Provide concealed fasteners where possible, and set units true to line and level as indicated. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.
4. Tie downspouts to underground drainage system.

#### **Cleaning and Protection:**

Remove temporary protective coverings and strippable films, if any, as metal roof panels are installed, unless otherwise indicated in manufacturer's written installation instructions. On completion of metal roof panel installation, clean finished surfaces as recommended by metal roof panel manufacturer. Maintain in a clean condition during construction.

### **GENERAL- DOORS**

Section covers furnishing all labor, materials, and equipment necessary for providing all exterior doors and frames.

#### **MAN DOOR**

This specification covers aluminum door, frame, and accessories. Aluminum doors shall be specifically design for use in wastewater treatment facilities or other similarly corrosive environments.

The aluminum door and frame supplied shall be Series 100BE as manufactured by Cline Aluminum Doors, Inc. or approved equal. Doors shall be aluminum flush with clear anodized finish.

#### **Accessories:**

All fasteners shall be aluminum, nonmagnetic stainless steel, or other material warranted by manufacturer as non-corrosive and compatible with aluminum components. Do not use exposed fasteners. Manufacturer shall use high-strength aluminum units for brackets and reinforcements where feasible, otherwise, nonferrous stainless steel. Bituminous coatings shall be cold-applied asphaltic mastic, compounded for 30-mil (0.76 mm) thickness per coat.

1. Owner Standard Lock Kits: All doors requiring locks shall have locks provided and cored to match Owner standard lock and keys. If construction cores are utilized during project, Contractor shall provide Owner with construction key(s) for all temporary locks.
2. Key Cylinders: Key cylinders shall utilize the Owner's standard core and key. The key cylinder shall fit all exterior locking hardware and shall automatically lock when the door is closed. A vandal resistant cover plate shall be provided at exterior surface of doors.
3. Door Handles: Corbin Russwin CL3551 Entrance Lock, AAZD Lever with 626 Finish or equal.
4. Dead Bolt: Dead bolt locks shall use a 1 inch bolt throw, with concealed mounting screws, and a satin chrome finish. The dead bolt shall be thrown or retracted by a key on the outside and by a thumb knob on the inside. The dead bolt shall be equal to Corbin Russwin DL3013 or equal.
5. Closer: Corbin Russwin DC6210, 689 finish or equal.

**Installation:**

The door shall be mounted as shown in the plans and installed in accordance with manufacturer's instructions and standards.

**Warranty:**

Manufacturer's standard form in which manufacturer agrees to repair or replace components that fails in materials or workmanship within specified warranty period.

**ROLLING SERVICE DOOR, HEAVY DUTY INSULATED**

This specification covers the rolling service door, frame, and accessories. Door shall be specifically design for use in wastewater treatment facilities or other similarly corrosive environments. The rolling doors shall be Series 625 as manufactured by Overhead Door Corporation or approved equal. Door slats and hood shall be aluminum with mill finish.

1. Curtain: Interlocking roll-formed slats as specified following. Endlocks shall be attached to each end of alternate slats to prevent lateral movement. The curtain shall have a flat profile type F-265I. The front slat shall be fabricated of Aluminum .040. The back slat shall be Aluminum .024. Slat cavity shall be filled with CFC-free foam-in-place, polyurethane insulation with a maximum u-value of 0.13.
2. Bottom Bar: The bottom bar shall be extruded aluminum. The bottom bar shall be bolted back to back to reinforce the curtain in the guides and shall have a bottom weather seal.
3. Guides: The guides shall be three (3) stainless steel angles with a minimum thickness of 3/16" (5mm). Guides shall be weather stripped with a vinyl weather seal at each jamb, on the exterior curtain side. Guides will be equipped with wind-lock bars as required to meet the minimum design wind-load of 20 psf.
4. Brackets: Brackets shall be stainless steel plates to support the counterbalance, curtain and hood.
5. Counterbalance: The counterbalance shall be adjustable helical torsion springs designed for standard 20,000 cycles. The counterbalance is housed in a steel tube or pipe barrel,

supporting the curtain with a deflection limited to 0.03" (0.76 mm) per foot of span [width]. The counterbalance shall be adjustable by means of an adjusting tension wheel.

6. Hood: The hood shall be minimum aluminum. Intermediate supports shall be furnished to support the hood where required on wider openings. The hood will be supplied with an internal hood baffle weather seal.
7. Operation: The door shall have manual operation. The operator shall include a chain hoist.
8. Locking: Manual chain-hoist-operated doors shall have chain keeper locks suitable for cylinder locks supplied with master-keyed cylinder as required to meet owner's key.

**Installation:**

The door shall be mounted as shown in the plans and installed in accordance with manufacturer's instructions and standards.

**Warranty:**

Manufacturer's standard form in which manufacturer agrees to repair or replace components that fails in materials or workmanship within specified warranty period.

**GYPSUM WALL BOARD- GENERAL**

Section covers furnishing all labor and materials necessary for installation and finishing of gypsum wallboard.

**INTERIOR GYPSUM WALLBOARD**

Panel Size: Provide in maximum lengths and widths available that will minimize joints in each are correspond with support system indicated.

1. Gypsum Wallboard: ASTM C 36.
2. Type X
3. Thickness: 5/8 inch.
4. Long Edges: Tapered.
5. Location: As indicated.

**GENERAL MATERIALS**

1. General: Comply with ASTM C 475.
2. Joint Tape:
3. Interior Gypsum Wallboard: Paper.
4. Joint Compound for Interior Gypsum Wallboard: For each coat use formulation that is compatible with other compounds applied on previous or for successive coats.

**APPLYING AND FINISHING PANELS, GENERAL**

1. Gypsum Board Application and Finishing Standards: ASTM C 840 and GA-216.
2. Install ceiling board panels across framing to minimize the number of abutting end joints and to avoid abutting end joints in the central area of each ceiling.
3. Stagger abutting end joints of adjacent panels not less than one framing member.
4. Space fasteners in gypsum panels according to referenced gypsum board application and finishing standard and manufacturer's written recommendations.
5. Space screws a maximum of 12 inches o.c. field and 8 inches o.c. at ends.

6. Multilayer Application: Apply base layers at right angles to framing members and offset face-layer joints one framing member, 12 inches minimum, from parallel base-layer joints, unless otherwise indicated or required by fire-resistance-rated assembly.
7. Prefilling: At open joints and damaged surface areas, use setting-type taping compound.
8. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting-type taping compound.
9. Fill Coat: For second coat use setting type sandable topping compound.
10. Finish Coat: For third coat use setting-type sandable topping compound.

## **GENERAL- INETRIOR GYPSUM WALLBOARD & PAINTING**

Section includes surface preparation and field painting of interior gypsum wallboard and associated trim. Color to be determined by owner based on contractor selected coating manufacturer.

### **MATERIALS:**

Interior Primer: Interior latex-based or alkyd primer of finish coat manufacturer and recommended in writing by manufacturer for use with finish coat and on substrate indicated.

Prime Coats: Before applying finish coats, apply a prime coat, as recommended by manufacturer. Recoat primed and sealed surfaces where evidence of suction spots or unsealed areas in first coat appears, to ensure a finish coat with no burn-through or other defects due to insufficient sealing.

Pigmented Finishes: Completely cover surfaces as necessary to provide a smooth surface of uniform finish, color, appearance, and coverage.

Cloudiness, spotting, holidays, laps, brush marks, runs, sags or other surface imperfections will not be acceptable.

## **FAN AND LOUVERS**

Section covers furnishing all labor, materials, and equipment necessary to perform all work necessary to install Direct drive wall exhaust fan and wall louvers per the specifications described herein, and as shown on the drawings.

Exhaust fan shall be direct drive 120Volts AC, single-phase wall mounted exhaust fan with a capacity of 3,800 cfm or greater with an outside wall mounted movable (gravity) blade wall louver.

1. Reference fan McMaster-Carr product 19105K25 or equal. Note: Required opening of the identified fan deviates from opening size identified in the drawings. Contractor to verify opening size and coordinate opening in CMU wall to accommodate supplied unit.
2. Exhaust fan supply air inlet exterior louver shall be a fixed blade wall louver. Reference wall louver McMaster-Carr product 2100K252.
3. Exhaust fan supply air inlet interior louver movable (gravity) Reference wall louver McMaster-Carr product 20015K66.