



**STATE OF WASHINGTON DEPARTMENTS OF ECOLOGY AND HEALTH  
PERMIT APPLICATION for RECLAIMED WATER USE**

**For Office Use Only:**

Date Received

Application/Permit No.

This application is for a

☐ New Reclaimed Water Use Permit

☒ Renewal

☐ Modification of permit # \_\_\_\_\_

as required in accordance with the provisions of Chapters 90.46 RCW. All questions must be answered completely and accurately to be considered for coverage. If a question does not apply, answer with NA.

**SECTION A. GENERAL INFORMATION**

**A-I. PERMITTEE:** ☒ Public ☐ Private UBI No. \_\_\_\_\_

Name of Utility or Business: Holmes Harbor Sewer District	Is the operator also the owner? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
	Name of Operator: Same
Primary Contact Name: Mark Dumke	Operator Primary Contact Name:
Title: Manager	Title:
Phone No: 360-331-4636	Phone No:
E-mail Address: sbr@whidbey.com	E-mail Address
Primary Mailing Address: PO Box 1330	Primary Mailing Address
City: Freeland Zip + 4: 98249	City Zip + 4
BILLING INFORMATION (if different from primary contact)	
Business/Company Name	Phone No.
Mailing Address	City Zip + 4

**A-II. Provide a narrative description and map of the entire project – not just the treatment facility.**

☒ **Check** this box if there are attached submittals for this section.

**A-III. WASTEWATER DISCHARGE MANAGEMENT:** ☐ Check here if the other required forms are attached.

Permits for reclaimed water are issued in combination with any required NPDES or state wastewater discharge permits. Check the boxes in column below to determine which (if any) wastewater discharge permit application forms apply for this facility. Note that unless 100% of the water generated will be reclaimed AND used, wastewater discharge applications must also be required. Permit application forms are available on Ecology's website.

- ☐ All wastewater is generated, treated and used on site. No wastewater discharges from this site.
- ☐ Wastewater discharges to waters of the US. NPDES PERMIT REQUIRED
- ☐ Wastewater discharges to land or ground water. STATE WASTE DISCHARGE PERMIT REQUIRED. ECY 040-179.
- ☐ This facility discharges industrial process wastewater for treatment at a publicly owned treatment works. STATE PRETREATMENT PERMIT REQUIRED. ECY 040-177.
- ☒ The only discharge from this site is reclaimed water meeting state standards (see Section V below).
- ☐ Facility discharges reclaimed water to a drywell, drainfield, or an infiltration system that uses perforated pipe to discharge to the subsurface and complies with the Underground Injection Control Program (UIC) regulations, 173-218 WAC.

**A-IV. RECLAIMED WATER PRODUCTION:** Section B required ☐ Check here if Attached.

Primary Treatment Facility Contact: Same as A1 Above	Title:
E-mail Address:	Phone No.
Mailing Address:	City Zip + 4
Check type(s) of reclaimed water quality produced. <input checked="" type="checkbox"/> Class A <input type="checkbox"/> Class B <input type="checkbox"/> Class C <input type="checkbox"/> Class D	For ground water recharge, surface water augmentation or wetlands check additional treatment or water quality requirements achieved. <input type="checkbox"/> Nitrogen reduction <input type="checkbox"/> Drinking water standards <input type="checkbox"/> Surface water standards <input type="checkbox"/> Wetland standards <input type="checkbox"/> Reverse osmosis <input type="checkbox"/> Other - Explanation attached

Provide the status of each required submittal below. If submittal does not apply to your facility, enter NA.

Submittal	Title	Date	Attached	Submitted	Approved
Reclaimed Water Engineering Report	Engineering Report for Wastewater Facilities - Adams & Clark	1990	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Reliability Assessment	Reliability Assessment & Storage Pond Addition - CHS Engrs	2007	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**Note:** The engineering report above is the report required in the State Water Reclamation and Reuse Standards Publication #97-023.

- ☐ Check this box if there are multiple engineering submittals for different treatment processes or sites. Attach a list of these specific submittals to include coverage under this permit

**A-V. RECLAIMED WATER USE: Section D Required** ☐ Check here if attached.

Check all categories of use of reclaimed water.	<input type="checkbox"/> Wetlands
<input type="checkbox"/> Industrial or commercial uses	<input type="checkbox"/> Streamflow augmentation
<input checked="" type="checkbox"/> Land application (irrigation)	<input type="checkbox"/> Direct aquifer recharge
<input type="checkbox"/> Impoundments	<input type="checkbox"/> Other - Explanation attached
<input type="checkbox"/> Groundwater recharge by surface percolation	<input type="checkbox"/> Indirect use (controlled)
	<input type="checkbox"/> Mitigation for new appropriate water rights

**A-VI. WATER RIGHT IMPAIRMENT INFORMATION**

State law requires that facilities that reclaim water shall not impair existing water rights downstream of any freshwater discharge points from such facilities unless compensation or mitigation is agreed to by the holder of the affected water right.

Does diversion of reclaimed water result in impairment of existing downstream water rights?

☒ No      ☐ Yes

If yes, briefly describe method of compensation or mitigation of the affected water right(s).

\_\_\_\_\_

**A-VII. SUMMARY OF REQUIRED SUBMITTALS**

Provide the status of each required submittal below. If submittal does not apply to your facility, enter NA.

Submittal	Title	Date	Attached	Submitted	Approved
Water Right Impairment Analysis	TBD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
User Contracts	N/A		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Public Water System's Cross Connection Control Plan	TBD		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ **Check** this box if there are multiple submittals under the above categories for use sites or uses.  
**Attach** a list of these specific submittals for coverage under this permit.

**A-VIII. CERTIFICATION BY PERMITTEE:**

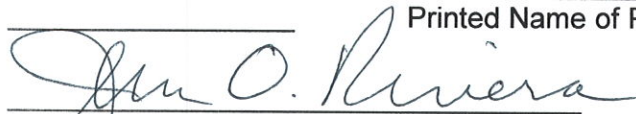
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Jens Rivera

HHSD Board President

Printed Name of Person Signing Below

Title



3-30-2018

Signature of Applicant

Date Applicant Signed

NOTE: Applications must be signed as follows: A.) For corporation, by a principal executive officer of at least the level of vice president; B.) For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or C.) For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

**A-IX. SUBMITTAL INSTRUCTIONS:**

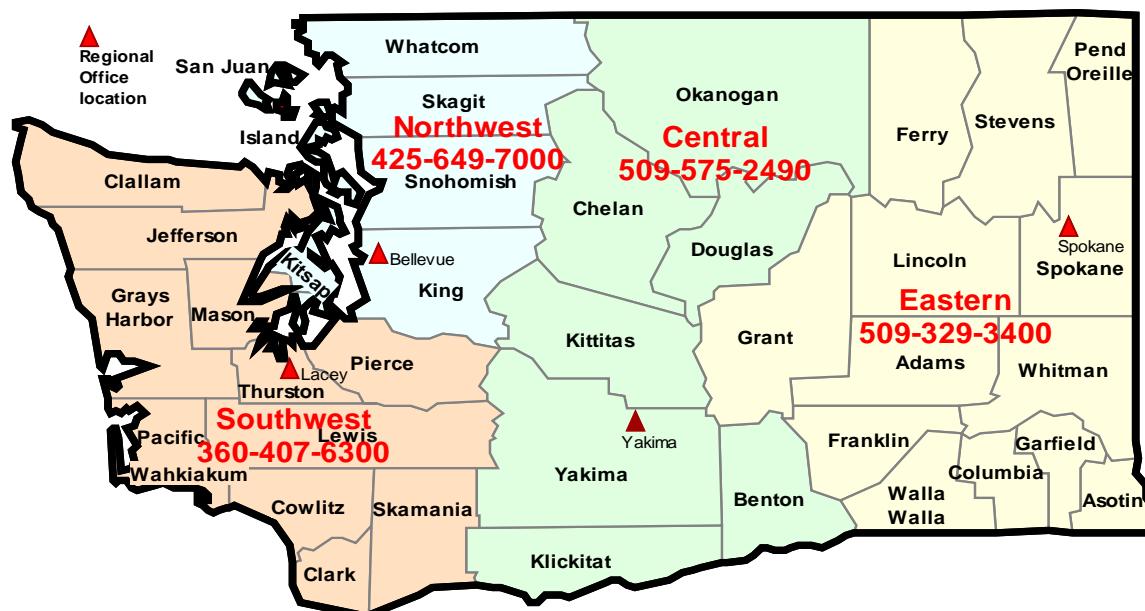
A complete application must contain all required forms for source control, discharges and reclaimed water use. The Departments of Ecology and Health may request additional information regarding water quality and the location, rate and purposes of use. Information from other submittals attached must reference submittal name, date and page number.

Submit the completed application forms to the appropriate Ecology regional office and to the Department of Health at the addresses listed below.

Washington State Department of Ecology (see map below for regional offices)	
Ecology Southwest Regional Office Water Quality Program Attn: Permit Coordinator PO Box 4775 Olympia, WA 98504-7775	Phone: 360-407-6279
Ecology Northwest Regional Office Water Quality Program Attn: Permit Coordinator 3190 - 160 <sup>th</sup> Avenue SE Bellevue, WA 98008-5452	Phone: 425-649-7201
Ecology Central Regional Office Water Quality Program Attn: Permit Coordinator 15 West Yakima Avenue, Suite 200 Yakima, WA 98902-3401	Phone: 509-457-7105
Ecology Eastern Regional Office Water Quality Program Attn: Permit Coordinator N. 4601 Monroe, Suite 100 Spokane, WA 99205-1295	Phone: 509-329-3537
Washington State Department of Health Office of Drinking Water, Suite #1500 Attn: Mamdouh El-Aarag, Water Reclamation & Reuse Program 16021 E. Indiana Avenue, Spokane Valley, Washington 99216	Phone: 509-329-2148

**Headquarters (Lacey) 360-407-6000**

**If you are speech or hearing impaired, call 711 or 1-800-833-6388 for TTY**



**STATE OF WASHINGTON DEPARTMENTS OF ECOLOGY AND HEALTH**  
**PERMIT APPLICATION for RECLAIMED WATER USE**

**SECTION B. RECLAIMED WATER PRODUCTION**

Complete a separate section B for each treatment facility site covered under this permit. All questions must be answered completely and accurately to be considered for coverage. If a question does not apply, answer NA.

**B-I. TREATMENT FACILITY SITE INFORMATION:**

Facility: Holmes Harbor Sewer District	
Primary Contact: Mark Dumke	Title: Manager
E-mail Address: sbr@whidbey.com	Phone No. 360-331-4636
Mailing Address: P.O. Box 1330	City: Freeland, WA      Zip + 4    98249
Provide latitude and longitude points where reclaimed water leaves the treatment facility: Latitude: 48.02942    Longitude : - 122.55117  Provide directions to site from nearest hwy or city/town: Freeland, WA.: North on Hwy 525, RT. on Honeymoon Bay Rd. approx 1 mile, LT on Chipshot stay right at Y and onto Antelope Dr. follow to end.	

**B-II. CLASS OF RECLAIMED WATER PRODUCED AT THIS FACILITY:**

- ☒ Class A     
 ☐ Class B     
 ☐ Class C     
 ☐ Class D  
☐ Other Process / Water Quality Limits (explain):

**B-III. EXISTING PERMITS:** List all existing environmental permits at this location by type, issue date, expiration date, and permit number. If no existing permits, enter NONE.

Type of Permit	Issued (date)	Expires (date)	Permit Number
Biosolids	9/4/2015	9/4/2020	BT7373
Reclaimed Water Permit	9/20/2013	9/30/2018	ST0007373

Facility:\_\_\_\_\_

**B-IV. LIST ALL SOURCES OF WATER TREATED TO RECLAIMED WATER AT THIS SITE:**

Type of Water	Where Generated	Volume Treated	Percentage of Total
Untreated Domestic Sewage	<input type="checkbox"/> On-site <input checked="" type="checkbox"/> Off-site	0.04500mgd	100
Secondary Effluent	<input type="checkbox"/> On-site <input type="checkbox"/> Off-site		
Storm Water	<input type="checkbox"/> On-site <input type="checkbox"/> Off-site		
Industrial Process Water	<input type="checkbox"/> On-site <input type="checkbox"/> Off-site		
Commercial Use Water	<input type="checkbox"/> On-site <input type="checkbox"/> Off-site		
Agricultural Industrial Process Water	<input type="checkbox"/> On-site <input type="checkbox"/> Off-site		
Other:	<input type="checkbox"/> On-site <input type="checkbox"/> Off-site		

**B-V. INFORMATION ON INDUSTRIAL AND COMMERCIAL FACILITIES DISCHARGING TO SOURCE WATER.**

Identify all industries and large commercial facilities discharging <u>to</u> the source water for the reclamation plant by name, type of industry, address telephone number and contact name. Attach additional sheets if needed.			
Industry/Facility Name:	N/A		
Type:			
State Permit #:			
Street Address:			
Mailing Address:			
Telephone:			
Contact Name:			
E-mail Address:			

## B-VI. TREATMENT PROCESSES USED TO PRODUCE RECLAIMED WATER AT THIS SITE:

**Check (✓)** all unit processes used to produce reclaimed water at this site. Enter the # of units.

Treatment Process	✓	Unit Process	# of Units	
Preliminary Treatment	<input type="checkbox"/>	Manually Operated Bar Screens		
	<input type="checkbox"/>	Mechanically Operated Bar Screens		
	<input type="checkbox"/>	Fine Screen – Size:		
	<input type="checkbox"/>	Comminutor/Grinder		
	<input type="checkbox"/>	Grit removal		
	<input type="checkbox"/>	Pre-Aeration		
	<input type="checkbox"/>	Odor Control		
	<input type="checkbox"/>	Flow Measurement		
	<input type="checkbox"/>	Flow Equalization		
	<input type="checkbox"/>	Septage or Other Hauled Wastes		
	<input type="checkbox"/>	Other:(specify)		
Primary Treatment	<input type="checkbox"/>	Sedimentation Tanks/Clarifiers		
	<input checked="" type="checkbox"/>	Septic Tanks	387	
	<input type="checkbox"/>	Other (Specify)		
Secondary Treatment Biological Oxidation	<input type="checkbox"/>	Activated Sludge	Conventional	
	<input checked="" type="checkbox"/>		Batch Treatment (SBR)	2
	<input type="checkbox"/>		Extended Aeration	
	<input type="checkbox"/>		Package Plant	
Post Secondary Treatment	<input checked="" type="checkbox"/>	Coagulation		1
	<input checked="" type="checkbox"/>	Flocculation		1
	<input type="checkbox"/>	Sedimentation		
	<input type="checkbox"/>	Filtration	High-Rate Rapid Sand Filter	
	<input type="checkbox"/>		Continuous Backwash Upflow	
	<input type="checkbox"/>		Rotating Filter Disk	
	<input type="checkbox"/>		Compressible Fiber Filter	
	<input checked="" type="checkbox"/>		Traveling Bridge Filter	1
	<input type="checkbox"/>		Membrane Filter <input type="checkbox"/> Microfiltration <input type="checkbox"/> Ultrafiltration	
<input type="checkbox"/>	Membrane Bioreactor <input type="checkbox"/> Microfiltration <input type="checkbox"/> Ultrafiltration			
<input type="checkbox"/>	Other: (specify)			
Advanced Treatment	<input type="checkbox"/>	Nanofiltration	N/A	
	<input type="checkbox"/>	Reverse Osmosis	N/A	
	<input type="checkbox"/>	Other (specify)		



Disinfection	<input type="checkbox"/>	Chlorine Gas	
	<input checked="" type="checkbox"/>	Hypochlorite	2
	<input type="checkbox"/>	Ultraviolet Light	
	<input type="checkbox"/>	Ozone	
	<input type="checkbox"/>	Other (specify):	
On-Site Storage	<input checked="" type="checkbox"/>	Lined Pond	3
	<input type="checkbox"/>	Unlined Pond	
	<input type="checkbox"/>	Covered Tank	
	<input type="checkbox"/>	Other (specify):	
Chemical Additives <input type="checkbox"/> List attached	<input checked="" type="checkbox"/>	List <u>all</u> chemical additives associated with the treatment processes (e.g. alum for coagulation, chlorine for oxidation). Attach list if needed. Coagulant, Polymer, Hypochlorite	
Other Treatment (Specify)	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		
	<input type="checkbox"/>		

**B-VII. FACILITY DIAGRAM**

**Attach** a sketch, aerial photograph, or map, including scale, of the treatment facility showing the following:

✓	Check items shown on the attachment.
<input type="checkbox"/>	Approximate overall dimensions of the facility
<input checked="" type="checkbox"/>	A properly labeled line drawing of all water and wastewater flows including direction of flow
<input checked="" type="checkbox"/>	All chemical storage areas
<input checked="" type="checkbox"/>	All discharge point(s) and receiving water(s)
<input checked="" type="checkbox"/>	All sludge (or biosolids) storage, processing or disposal areas
<input type="checkbox"/>	
<input type="checkbox"/>	

## B-VIII. CHARACTERISTICS OF RECLAIMED WATER PRODUCED

Enter X for parameters known to be present in the reclaimed water, or S for parameters suspected to be present. Provide data for all X or S. Mark NA for parameters that are not of concern at this facility.

☐ New Treatment Facility – Estimate concentrations based on design.

☒ Existing facility - Use actual operating data for the last year of operation where available - indicated by ( ✓ )

X/S	Actual data ✓	Parameter	Concentration			# of Analyses	Analytical Method	Detection Limit
			Minimum	Maximum	Average			
X	<input checked="" type="checkbox"/>	BOD (5 day)	2.0	9.7	4.7	104	sm521 0b	2mg/l
	<input type="checkbox"/>	COD						
	<input type="checkbox"/>	Total Organic Carbon						
X	<input checked="" type="checkbox"/>	Total Suspended Solids	0.2	4.1	1.3	104	sm254 0d	5mg/l
	<input type="checkbox"/>	Total Dissolved Solids						
	<input type="checkbox"/>	Conductivity						
X	<input checked="" type="checkbox"/>	pH	7.0	7.5	7.2	259	sm450 0h	
X	<input checked="" type="checkbox"/>	Ammonia-N	7.2	48.9	28.3	4	sm4500-nh3	
X	<input checked="" type="checkbox"/>	Total Kjeldahl N	9.3	38.4	23.6	4	sm4500-n	
X	<input checked="" type="checkbox"/>	Nitrate + Nitrite-N	0.29	8.87	3.1	4	sm450 0-no3	
	<input type="checkbox"/>	Total Nitrogen-N						
	<input type="checkbox"/>	Ortho-phosphate- P						
	<input type="checkbox"/>	Total-phosphate-P						
X	<input checked="" type="checkbox"/>	Total Residual Chlorine	1.4	8.8	3.8	364	sm450 0-cig	
	<input type="checkbox"/>	Free Residual Chlorine						
X	<input checked="" type="checkbox"/>	Total Coliform	0.1	1.3	0.13	364	sm922 2b	
X	<input checked="" type="checkbox"/>	Dissolved Oxygen	3.5	9.0	6.3	259	sm450 0	
	<input type="checkbox"/>	Total Oil and Grease						
	<input type="checkbox"/>	Calcium						
	<input type="checkbox"/>	Chloride						
	<input type="checkbox"/>	Fluoride						
	<input type="checkbox"/>	Magnesium						
	<input type="checkbox"/>	Potassium						
	<input type="checkbox"/>	Sodium						
	<input type="checkbox"/>	Sulfate						
	<input type="checkbox"/>	Barium (total)						
	<input type="checkbox"/>	Cadmium (total)						
	<input type="checkbox"/>	Copper (total)						
	<input type="checkbox"/>	Iron (total)						
	<input type="checkbox"/>	Lead (total)						

<input type="checkbox"/>	Manganese (total)						
<input type="checkbox"/>	Mercury						
<input type="checkbox"/>	Selenium						
<input type="checkbox"/>	Silver (total)						
<input type="checkbox"/>	Zinc (total)						

Facility: \_\_\_\_\_

### B-IX. ADDITIONAL CHARACTERISTICS OF RECLAIMED WATER PRODUCED

Contact the appropriate Ecology regional office to check on additional testing requirements. List Parameters Not Included Above. Enter X for parameters which are known to be present in the reclaimed water. S for parameters suspected to be present in the reclaimed water. Provide data for all parameters marked. This section should address all organic chemical constituents expected such as volatile organic and synthetic organic compounds, pesticides, herbicides and fungicides; radionuclide and disinfection byproducts that may be generated in the disinfection process.

X/S	Actual data ✓	Parameter	Concentration			# of Analyses	Analytical Method	Detection Limit
			Minimum	Maximum	Average			
x	<input checked="" type="checkbox"/>	Turbidity	0.2	2.6	0.68	364	sm2130b	
x	<input checked="" type="checkbox"/>	Phosphorus	0.7	4.8	3.0	4/yr	sm4500p	
	<input type="checkbox"/>							
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### B-X. RECLAIMED WATER PRODUCTION VOLUME

**Provide** the following information regarding reclaimed water production at this facility :

Maximum Production Capacity: <sup>1</sup> Design MGD	0.200 mgd
Average Flow(Maximum month) Design MGD	0.100 mgd
Total Annual Volume of Reclaimed Water Available For Use (MG)	Approx 15 MG
Estimate Actual Annual Volume of Reclaimed Water Used (MG)	Approx 15 MG
Date Began Operation	Approx 1997

<sup>1</sup> "Maximum production capacity" refers to the amount of reclaimed water that a treatment facility is designed to produce at peak output and 24-hour production.

Date of Last Upgrade	2009 Off Spec Pond
Date Planned Upgrades	N/A
Describe how influent flow is measured: Meter	
Describe how effluent flows are measured: Meter	
<b>Attach</b> actual flow records for the last year (if available) 2017 DMRs attached	

**B-XI. FACILITY ALARMS.** Describe how the following alarm features are provided. If referencing information in an engineering report or other submittal, give name of submittal, date and page number of information. Attach additional sheets if needed.

Required Alarms	How Provided
Loss of power from normal power supply	Alarm - Backup Generator
Alarms independent of normal power supply	All, Stand By Power
Master Alarm Inter-connect all site alarms <b>Who is notified? Duty Personnel</b>	Alarm
Master alarm to remote service location <b>Who is notified? Duty Personnel</b>	Alarm

**B-XII. FACILITY RELIABILITY.** In the table below, indicate (✓) which reliability requirements are used at this facility. One or more reliability features are required for each category. If the treatment category does not apply to this facility, write NA.

Reliability Category	✓	Option
Power Supply	Check which of the following are provided (at least one required)	
	<input checked="" type="checkbox"/>	Alarm and standby power source
	<input type="checkbox"/>	Alarm & automatically actuated short term storage or disposal
	<input checked="" type="checkbox"/>	Automatically actuated long term storage
	<input type="checkbox"/>	Approved other - specify
Emergency Storage or Disposal	Check which of the following are provided (at least one required)	
	<input checked="" type="checkbox"/>	Long term storage on-site. No disposal options
	<input type="checkbox"/>	Emergency short-term storage with approved disposal option
	<input type="checkbox"/>	Approved other – specify
Biological Treatment	Check which of the following are provided (at least one required)	
	<input checked="" type="checkbox"/>	Alarm and multiple units treating entire flow with one not in service
	<input type="checkbox"/>	Alarm, short-term storage or disposal and standby equipment
	<input checked="" type="checkbox"/>	Alarm and long-term storage or disposal provisions
	<input checked="" type="checkbox"/>	Automatic diversion to long-term storage or disposal.
	<input type="checkbox"/>	Approved other – specify
Secondary Sedimentation	Check which of the following are provided (at least one required)	
	<input type="checkbox"/>	Multiple units treating entire flow with one unit not in service.
	<input type="checkbox"/>	Standby sedimentation unit process
	<input type="checkbox"/>	Approved long-term storage or disposal provisions

		Approved other – specify N/A
Coagulation	Check which of the following are provided (all four are required).	
	<input checked="" type="checkbox"/>	Standby chemical feeders
	<input checked="" type="checkbox"/>	Adequate chemical storage and conveyance facilities
	<input checked="" type="checkbox"/>	Adequate reserve chemical supply
	<input checked="" type="checkbox"/>	Automatic dosage control

Facility:\_\_\_\_\_

Coagulation (continued)	Check which of the following are provided (at least one required)	
	<input type="checkbox"/>	Alarm and multiple units treating entire flow with one not in service.
	<input type="checkbox"/>	Alarm, short-term storage or disposal and standby equipment.
	<input checked="" type="checkbox"/>	Alarm and long-term storage or disposal provisions
	<input checked="" type="checkbox"/>	Automatic diversion to long-term storage or disposal provisions.
	<input type="checkbox"/>	Approved other – specify
Filtration	Check which of the following are provided (at least one required)	
	<input type="checkbox"/>	Alarm and multiple units treating entire flow with one not in service.
	<input type="checkbox"/>	Alarm, short-term storage or disposal and standby equipment.
	<input checked="" type="checkbox"/>	Alarm and long-term storage or disposal provisions
	<input checked="" type="checkbox"/>	Automatic diversion to long-term storage or disposal provisions.
	<input type="checkbox"/>	Approved other – Specify
Reverse Osmosis	Check which of the following are provided (at least one required)	
	<input type="checkbox"/>	Alarm and multiple units treating entire flow with one not in service.
	<input type="checkbox"/>	Alarm, short-term storage or disposal and standby equipment.
	<input type="checkbox"/>	Alarm and long-term storage or disposal provisions
	<input type="checkbox"/>	Automatic diversion to long-term storage or disposal provisions.
	<input type="checkbox"/>	Approved other – Specify N/A
Ultraviolet Disinfection	Check which of the following are provided (at least one required)	
	<input type="checkbox"/>	Alarm and multiple units treating entire flow with one not in service.
	<input type="checkbox"/>	Alarm, short-term storage or disposal and standby equipment.
	<input type="checkbox"/>	Alarm and long-term storage or disposal provisions
	<input type="checkbox"/>	Automatic diversion to long-term storage or disposal provisions.
	<input type="checkbox"/>	Approved other – Specify N/A
Chlorine Disinfection	Check which of the following are provided (all six are required).	
	<input checked="" type="checkbox"/>	Standby chlorinator
	<input checked="" type="checkbox"/>	Standby chlorine supply
	<input type="checkbox"/>	Manifold system to connect chlorine cylinders
	<input type="checkbox"/>	Chlorine scales
	<input type="checkbox"/>	Automatic switchover to full chlorine cylinders
	<input checked="" type="checkbox"/>	Continuous measuring and recording of chlorine residual
	Check which of the following are provided (at least one required)	

<input checked="" type="checkbox"/>	Alarm and standby chlorinator
<input type="checkbox"/>	Alarm, short-term storage or disposal and standby equipment.
<input checked="" type="checkbox"/>	Alarm and long-term storage or disposal provisions
<input checked="" type="checkbox"/>	Automatic diversion to long-term storage or disposal provisions.
<input type="checkbox"/>	Alarm and multiple point chlorination. Each point has independent power source, separate chlorinator and separate chlorine supply.
<input checked="" type="checkbox"/>	Approved other – specify Sodium Hypochlorite is used

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**SECTION C. RECLAIMED WATER DISTRIBUTION**

NOTE: Complete a separate form C for each reclaimed water distribution system under this permit.

**C-I. DISTRIBUTOR INFORMATION:**

Treatment Facility Providing Reclaimed Water :	
Water Distributor: Holmes Harbor Sewer District	Is the distributor also the owner of the treatment facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If no attach a copy of the agreement used to control the water distribution and use. <input type="checkbox"/> Agreement attached
Primary Contact Name: Mark Dumke	
Title: Manager	
Phone No: 360-331-4636	
E-mail Address: sbr@whidbey.com	
Primary Mailing Address PO bx 1330	
City Freeland Zip + 498249	

**C-II CLASS OF RECLAIMED WATER DISTRIBUTED:** ☒ A ☐ B ☐ C ☐ D  
☐ Other Process / Water Quality Limits (explain):

**C-III. TOTAL WATER SUPPLY AVAILABLE FROM THIS DISTRIBUTION SYSTEM:**

Source of Water	Average Daily Flow (MGD)
Reclaimed Water Produced	0.0450
Other Water Distributed in this system:	(enter total) 0
<input type="checkbox"/> Surface Water <input type="checkbox"/> Ground Water <input type="checkbox"/> Storm Water <input type="checkbox"/> Drinking Water	

<input type="checkbox"/> Other:	
Reclaimed Water Recovered From Aquifer Storage	0
<b>TOTAL</b>	<b>0.0450</b>

Facility:\_\_\_\_\_

**STATE OF WASHINGTON DEPARTMENTS OF ECOLOGY AND HEALTH  
PERMIT APPLICATION for RECLAIMED WATER USE**

**SECTION D. RECLAIMED WATER USE**

NOTE: Complete a separate form D for each reclaimed water customer (water user) under this permit. For subdivisions with a number of residential users, a single form may be used.

**D-I. GENERAL INFORMATION:**

Name of Customer (Water User)	
Site Address:1200 Antelope DR. ( If no address describe the location)	CityFreeland Zip + 498249
Provide a legal description with latitude and longitude if known. Lat. : 48.02942 Long: -122.55117	
Primary Contact: Mark Dumke	Title:Manager
Phone No:360-331-4636	E-mail Address:sbr@whidbey.com
Mailing Address: PO. box 1330	CityFreeland Zip + 4-
Name of Reclaimed Water Distributor (Purveyor):Holmes Harbor Sewer District	Is the customer (water user ) the same as the: Treatment facility owner (Permittee) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Distributor (purveyor) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  If no, attach a copy of the agreements used to control the use. <input type="checkbox"/> Agreement attached
Name of Drinking Water System Purveyor:Freeland Water & Sewer District	Name of Cross Connection Control Program Administrator:

**D-II. DESCRIPTION OF USE OF RECLAIMED WATER:**

- The volume of reclaimed water use at this site is ☐ Estimated ☒ Metered
- Describe the uses of reclaimed water at this site. Using available flow records and other available information, allocate the average flows among the various use categories. For each type of reclaimed water use at this site, enter the permitted capacity, average flows and acreage.  
☐ Same as Section C - IV of this application ☐ Additional information is attached.
- Describe any plans to modify the use of reclaimed water at this site.



No modifications



Description attached.



### D-III. SITE ACCESS AND NOTIFICATION OF USE

In the table below, indicate (✓) which methods are used at this area to notify the public of reclaimed water use.

<input checked="" type="checkbox"/>	Check which of the following are provided:
<input checked="" type="checkbox"/>	Advisory signs posted at location
<input type="checkbox"/>	Advisory signs posted on tank trucks
<input checked="" type="checkbox"/>	Advisory signs posted in storage areas
<input checked="" type="checkbox"/>	Written notices. Check who receives notification: <input checked="" type="checkbox"/> General Public <input type="checkbox"/> Employees <input type="checkbox"/> Residents <input type="checkbox"/> Customers
<input checked="" type="checkbox"/>	Golf course score cards
<input type="checkbox"/>	Identification of areas not designated for reclaimed water use. Check which apply: <input type="checkbox"/> Buildings <input type="checkbox"/> Drinking fountains <input type="checkbox"/> Eating areas <input type="checkbox"/> Passing vehicles <input type="checkbox"/> Other (Specify): _____
<input type="checkbox"/>	Purple color coding: Check which apply: <input type="checkbox"/> Pipes <input type="checkbox"/> Valves <input type="checkbox"/> Outlets
<input checked="" type="checkbox"/>	Training programs: <input checked="" type="checkbox"/> Employees <input type="checkbox"/> Residents <input type="checkbox"/> Customers <input type="checkbox"/> Truck use <input type="checkbox"/> Other (Specify): _____

### D-IV. CROSS CONNECTION CONTROL

Check which of the following apply:
<input checked="" type="checkbox"/> Reclaimed water use area is serviced only with reclaimed water
<input type="checkbox"/> Reclaimed water use area is serviced with both reclaimed and potable water
<b>Answer all questions below where dual potable and reclaimed water systems exist.</b>
1. All public water systems servicing this area are actively implementing and enforcing cross-connection control plans. <input type="checkbox"/> Yes <input type="checkbox"/> No
2. All cross-connection control programs have been accepted by the Department of Health. <input type="checkbox"/> Yes <input type="checkbox"/> No
3. How many illegal cross-connections were identified during the last reporting period (permit)?  a. How many of these were eliminated? b. Attach description of any cross-connections found and efforts to eliminate. <input type="checkbox"/> Attached

**D-V. BEST MANAGEMENT PRACTICES (FOR SITE USE OF RECLAIMED WATER)**

☒ All reclaimed water is used at this site is consumed on site. Site has no discharges.

☐ Site has the following discharges of reclaimed water to waters of the state.

☐ Aquifer recharge by: ☐ Surface percolation ☐ Direct injection

Note: If not owned by the Permittee, a separate permit application may be required for this discharge.

☐ Discharges to surface waters or to wetlands discharging to surface waters. NPDES PERMIT REQUIRED

Enter existing permit number (if any) \_\_\_\_\_.

☐ This site uses reclaimed water for industrial process wastewater which is then discharged to a publicly owned treatment works. STATE PRETREATMENT PERMIT REQUIRED. ECY 040-177.

☐ Discharges to wetlands that discharge to ground water. STATE WASTE DISCHARGE PERMIT REQUIRED. ECY 040-179.

In the table below, indicate (✓) which methods are used at this area to regulate reclaimed water use.

Category	✓	Option
General Site Management		Check which of the following are provided:
	<input type="checkbox"/>	Other water used at this reclaimed water use site. Check all that apply: <input type="checkbox"/> Public potable water system <input type="checkbox"/> Private well <input type="checkbox"/> Surface water
	<input checked="" type="checkbox"/>	Site access is <input type="checkbox"/> unrestricted <input checked="" type="checkbox"/> restricted to public <input type="checkbox"/> restricted to most employees
	<input type="checkbox"/>	Rules prohibit the spraying with reclaimed water.
	<input checked="" type="checkbox"/>	Reclaimed water is confined to use areas. Set back distance:
	<input type="checkbox"/>	Rules prohibit hose bibs on reclaimed water lines.
	<input checked="" type="checkbox"/>	Use of reclaimed water is secured (authorized personnel only).
	<input checked="" type="checkbox"/>	Rules prohibit ponding of reclaimed water.
Impoundments & Storage Ponds	<input type="checkbox"/>	Other restrictions (specify):  <input type="checkbox"/> Additional information is attached.
	<input checked="" type="checkbox"/>	Site has lined impoundments (ponds) with reclaimed water.
	<input type="checkbox"/>	Site has unlined impoundments (ponds) with reclaimed water. Describe method of seepage control. N/A <input type="checkbox"/> attached
	<input type="checkbox"/>	Describe method to prevent breeding of vectors (for health protection). N/A <input type="checkbox"/> attached
	<input type="checkbox"/>	Describe method to prevent odor, slime, poor aesthetics. N/A <input type="checkbox"/> attached
	<input type="checkbox"/>	Describe ground water monitoring (if any): N/A <input type="checkbox"/> attached
	<input type="checkbox"/>	Other (Specify):  <input type="checkbox"/> Additional information is attached.

Irrigation Uses	<input checked="" type="checkbox"/>	Site has irrigation uses. <input type="checkbox"/> Seasonal use <input checked="" type="checkbox"/> Year round use <input type="checkbox"/> Landscape <input type="checkbox"/> Agriculture
	<input checked="" type="checkbox"/>	Type of irrigation <input checked="" type="checkbox"/> Spray irrigation <input type="checkbox"/> Flood irrigation <input type="checkbox"/> Surface drip system <input type="checkbox"/> Subsurface drip system <input type="checkbox"/> Other (specify): _____
	<input checked="" type="checkbox"/>	Hydraulic loading rates determined as follows: Check method boxes below: <input type="checkbox"/> By water balance <input checked="" type="checkbox"/> By other method Describe: <u>Irrigation Management Report</u>  <input type="checkbox"/> Calculations attached <input checked="" type="checkbox"/> Submitted previously <input checked="" type="checkbox"/> Approved
	<input checked="" type="checkbox"/>	Application is controlled. Check methods of control. <input type="checkbox"/> Irrigation schedule (if available) attached. <input type="checkbox"/> Apply only when crops are growing. <input checked="" type="checkbox"/> Apply at night or when public is not present. <input type="checkbox"/> High wind cutoff to irrigation controls at <input type="checkbox"/> 15 mph <input type="checkbox"/> 25 mph <input checked="" type="checkbox"/> No application when ground is frozen <input type="checkbox"/> Use temperature set point <input checked="" type="checkbox"/> No application when ground in saturated <input type="checkbox"/> Use moisture sensors <input type="checkbox"/> Other (specify): _____
	<input type="checkbox"/>	Describe ground water monitoring N/A
		<input type="checkbox"/> Additional information is attached

#### D-VI. LAND APPLICATION AND GROUNDWATER RECHARGE

1. For land application and groundwater recharge sites, attach a topographic map (USGS 7.5 minute) showing the following information:
  - a. Surface water drainage systems with ¼ mile of the site
  - b. All wells within 1 mile of the site
  - c. Any discharge points
  - d. Land uses and zoning adjacent to the site
  - e. Groundwater gradient☐ Map attached
2. Describe soils at this site using information from local soil survey reports. ☒ Additional information attached.
3. Describe local geology and hydrogeology within one mile of this site. ☒ Additional information attached.

**D-VII. GROUNDWATER INFORMATION**

If groundwater monitoring is required or available, provide measurements from monitoring wells or supply wells in the area of the groundwater recharge or irrigation. Provide the location of each well on a map. Attach well logs and well I.D. # when available. Copy this page for each well.

Well ID Number: N/A
☐ New Reclaimed Water Site – Background
 ☐ Existing Site

Parameter	Concentration			# of Analyses	Analytical Method	Detection Limit
	Minimum	Maximum	Average			
BOD (5 day)						
COD						
Total Organic Carbon						
Total Suspended Solids						
Total Dissolved Solids						
Conductivity						
pH						
Ammonia-N						
Total Kjeldahl N						
Nitrate + Nitrite-N						
Total Nitrogen-N						
Ortho-phosphate- P						
Total-phosphate-P						
Total Residual Chlorine						
Free Residual Chlorine						
Total Coliform						
Dissolved Oxygen						
Total Oil and Grease						
Calcium						
Chloride						
Fluoride						
Magnesium						
Potassium						
Sodium						
Sulfate						
Barium (total)						
Cadmium (total)						
Copper (total)						
Iron (total)						
Lead (total)						
Manganese (total)						
Mercury						
Selenium						
Silver (total)						
Zinc (total)						
Water Level						

**D-VIII. RECLAIMED WATER USE CAPACITY ALLOCATION**

Using available flow records and other available information, allocate the average flows among the various use categories. For each type of reclaimed water use, enter the permitted capacity, average flows and acreage.

Use Category	Sub-Category	Capacity (MGD)	Average Flow (MGD)	Area (acres)
Water Production	Treatment Plant Uses			
Industrial Use	Process & Product Production			
	Cooling Use			
	Other			
Commercial Use	Toilet flushing			
	Fire protection			
	Other			
Public Access Land Application (irrigation)	Golf Course	Apprx 0.16	Apprx 0.08	approx 56
	Residential			
	Parks & Playgrounds			
	Schools			
	Cemeteries			
	Other			
Agricultural Land Application (irrigation)	Food Crops			
	Grass, Pasture			
	Other			
Groundwater Recharge	Surface Percolation			
	Direct Injection			
Wetlands	Constructed Treatment (aesthetic/polishing)			
	Beneficial Use (created)			
	Natural (restore)			
Surface Water	Augmentation			
Municipal Uses	Sewer Cleaning			
	Street Cleaning			
	Construction Compaction			
	Other			
Other (specify)				
<b>TOTAL</b>		0.16	0.08	56

## **Holmes Harbor Sewer District (HHSD) 2018 Permit Application for Reclaimed Water Use**

A.II Provide a narrative description and map of the entire project area – not just the treatment facility.

HHSD is located on Whidbey Island, Island County, Washington on the west side of Holmes Harbor. HHSD collects septic tank effluent from residential customers within the platted area surrounding Holmes Harbor Golf Course. The effluent is conveyed to HHSD's Water Reclamation Facility, where it is treated to Class A Reclaimed Water, subsequently stored and then used to irrigate approximately 56 acres of the golf course, typically between the months of April and September.



APPROXIMATE EASEMENT AREAS			
HOLE NO.	GROSS AREA (AC)	LESS	NET AREA (AC)
1,2,7,8,18	20.5	0	20.5
3,4,5,6	11.7	3.1*	8.6
9,10,16,17	12.6	0	12.6
11,12	6.5	0	6.5
13,14,15	11.4	3.2**	8.2
<b>TOTAL</b>	<b>62.7</b>	<b>6.3</b>	<b>56.4</b>

\* DEDUCT INCLUDES  
X-4 (FORESTED)

\*\* DEDUCT INCLUDES  
X-1 (PARCEL 5 - GC MAINT. AREA & PRIVATE PROP)  
X-2 (FORESTED)  
X-3 (FORESTED)

APPROXIMATE GREENS AREA  
(INCLUDED ABOVE)  
= 6.2 ACRES  
9.7% OF GROSS AREA  
10.8% OF NET AREA

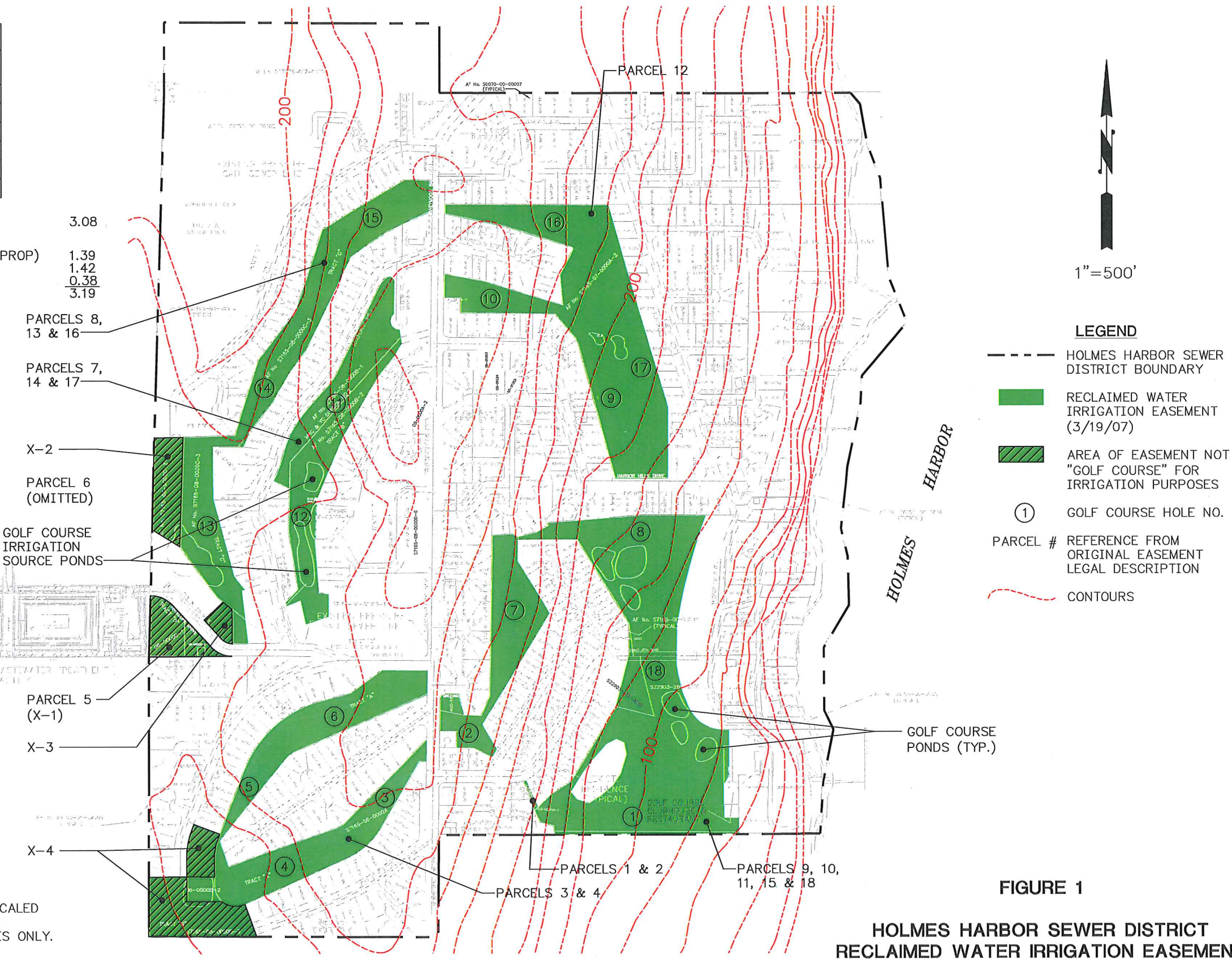
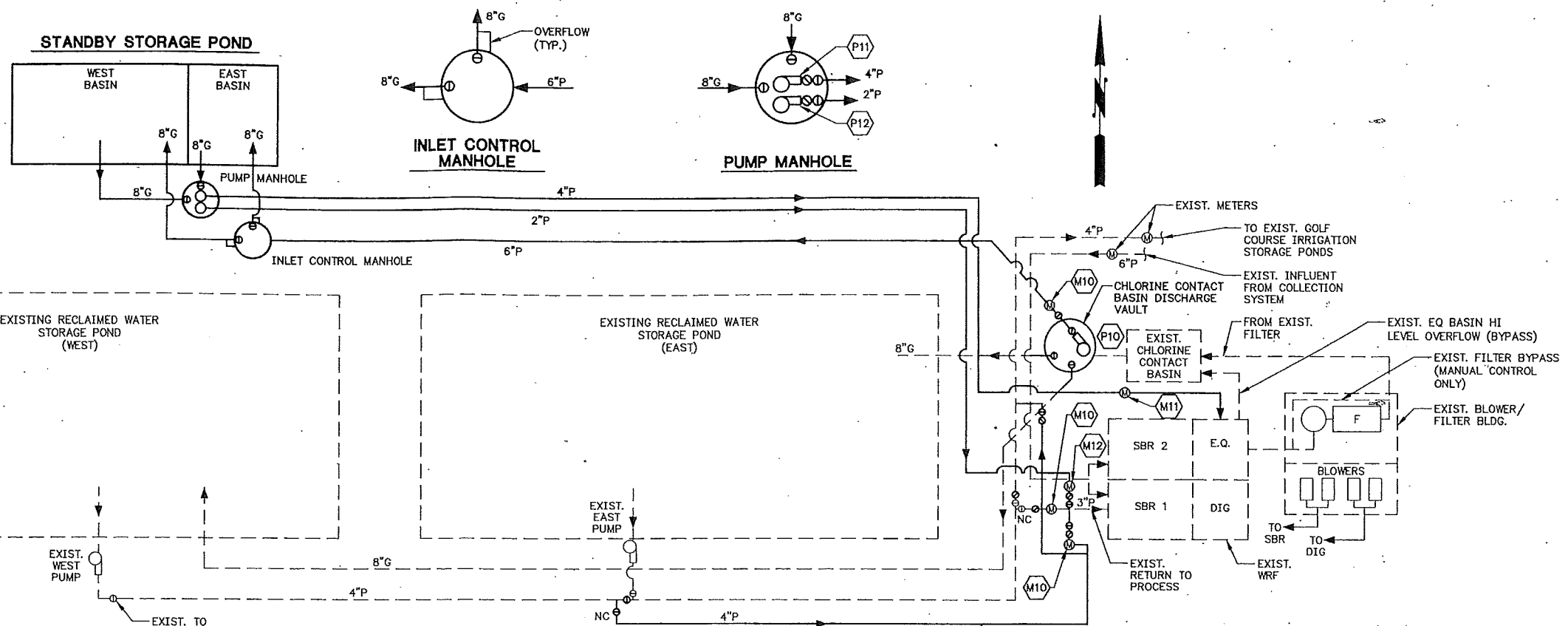


FIGURE 1

HOLMES HARBOR SEWER DISTRICT  
RECLAIMED WATER IRRIGATION EASEMENT

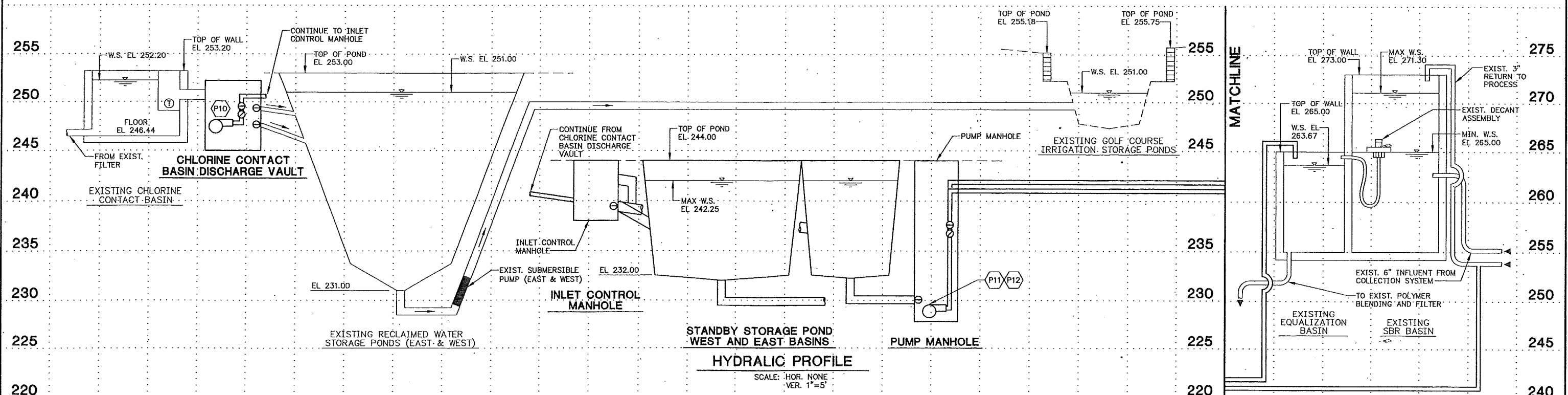




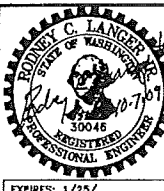
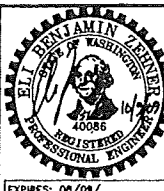
**PROCESS SCHEMATIC**  
NOT TO SCALE

CALL 2 BUSINESS  
DAYS BEFORE  
YOU DIG  
1-800-424-5555

REVISED TO CONFORM TO  
CONSTRUCTION RECORDS  
BY VLG  
CHECKED EZ  
DATE 09/11/09



**HYDRAULIC PROFILE**  
SCALE: HOR. NONE  
VER. 1"=5'



**CHS**  
CHS ENGINEERS, LLC  
12807 BEL-RED ROAD SUITE 101  
BELLEVUE, WA 98005-2500  
TEL (425) 637-3693 FAX (425) 637-3694

Drawn By	Date	Checked By	Date
JK	10-06	EZ	7-07
Designed By	Date	Approved By	Date
BW/EZ	10-06	RL	7-07

**HOLMES HARBOR  
SEWER DISTRICT**

Scale:  
Horiz. NONE  
Vert. 1"=5'  
Job No.  
530506

**WRF WATER STORAGE POND**  
**PROCESS SCHEMATIC  
AND  
HYDRAULIC PROFILE**

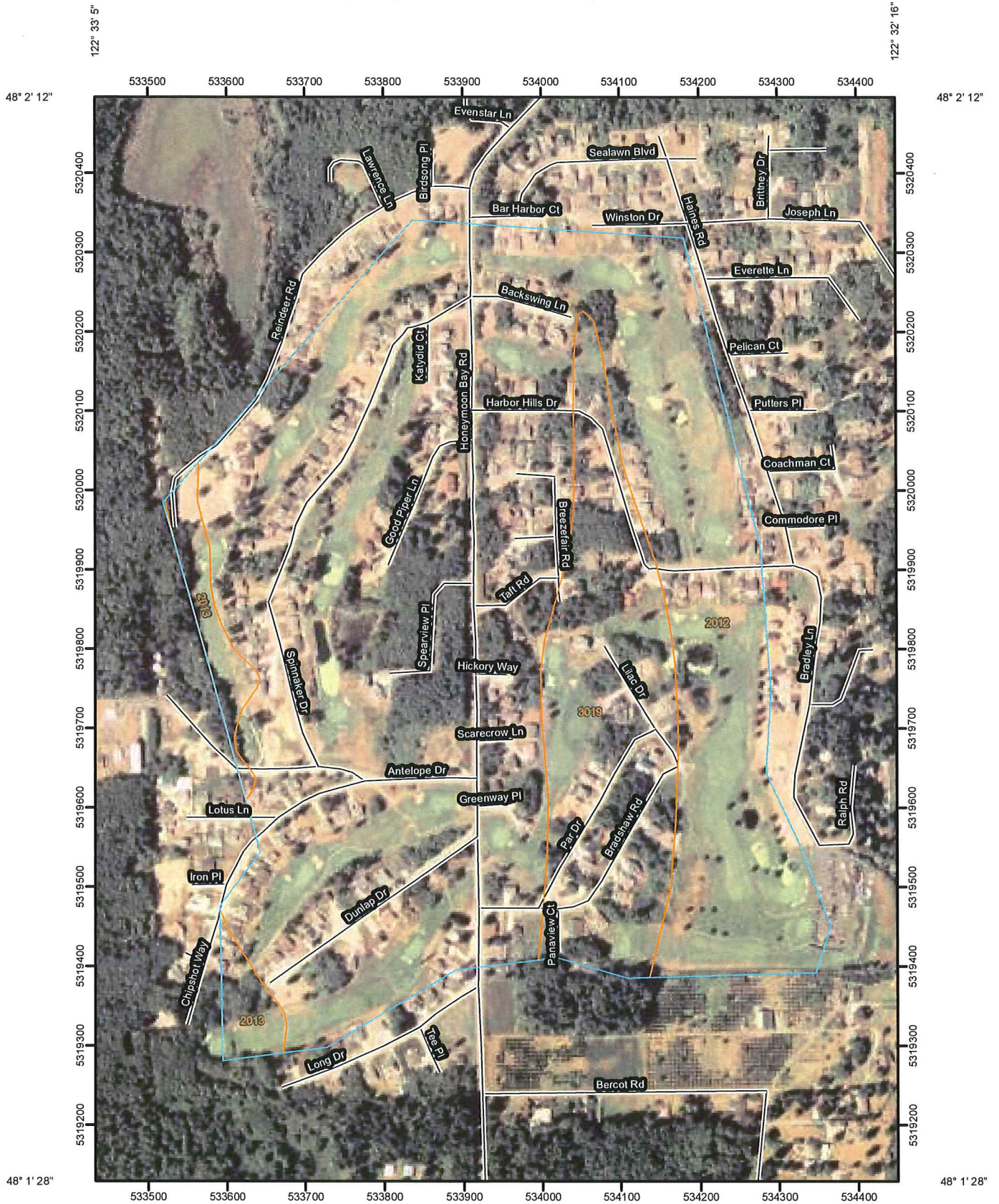
Sheet **3**  
Of **19**

530506 - Water Storage Pond Design - ASBUILT.dwg 11 22-04 09/11/09

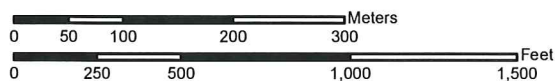
No.	Date	By	Ckd.	Appr.	Revision
3	9/09	VG	EZ	RL	RECORD DRAWINGS
2	7/07	JK	EZ	RL	ISSUED FOR BID
1	4/07	JK	EZ	RL	ISSUED FOR DOE/DOH APPROVAL



Soil Map—Island County, Washington  
(Holmes Harbor Sewer District)




Map Scale: 1:6,530 if printed on A size (8.5" x 11") sheet.






















Soil Map—Island County, Washington  
(Holmes Harbor Sewer District)


# MAP LEGEND

**Area of Interest (AOI)**  
 Area of Interest (AOI)

**Soils**  
 Soil Map Units

## Special Point Features




-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot
-  Spoil Area
-  Stony Spot

 Very Stony Spot

 Wet Spot

 Other

## Special Line Features

-  Gully
-  Short Steep Slope
-  Other

## Political Features

 Cities

## Water Features

 Streams and Canals

## Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

# MAP INFORMATION

Map Scale: 1:6,530 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Island County, Washington  
 Survey Area Data: Version 10, Jun 28, 2012

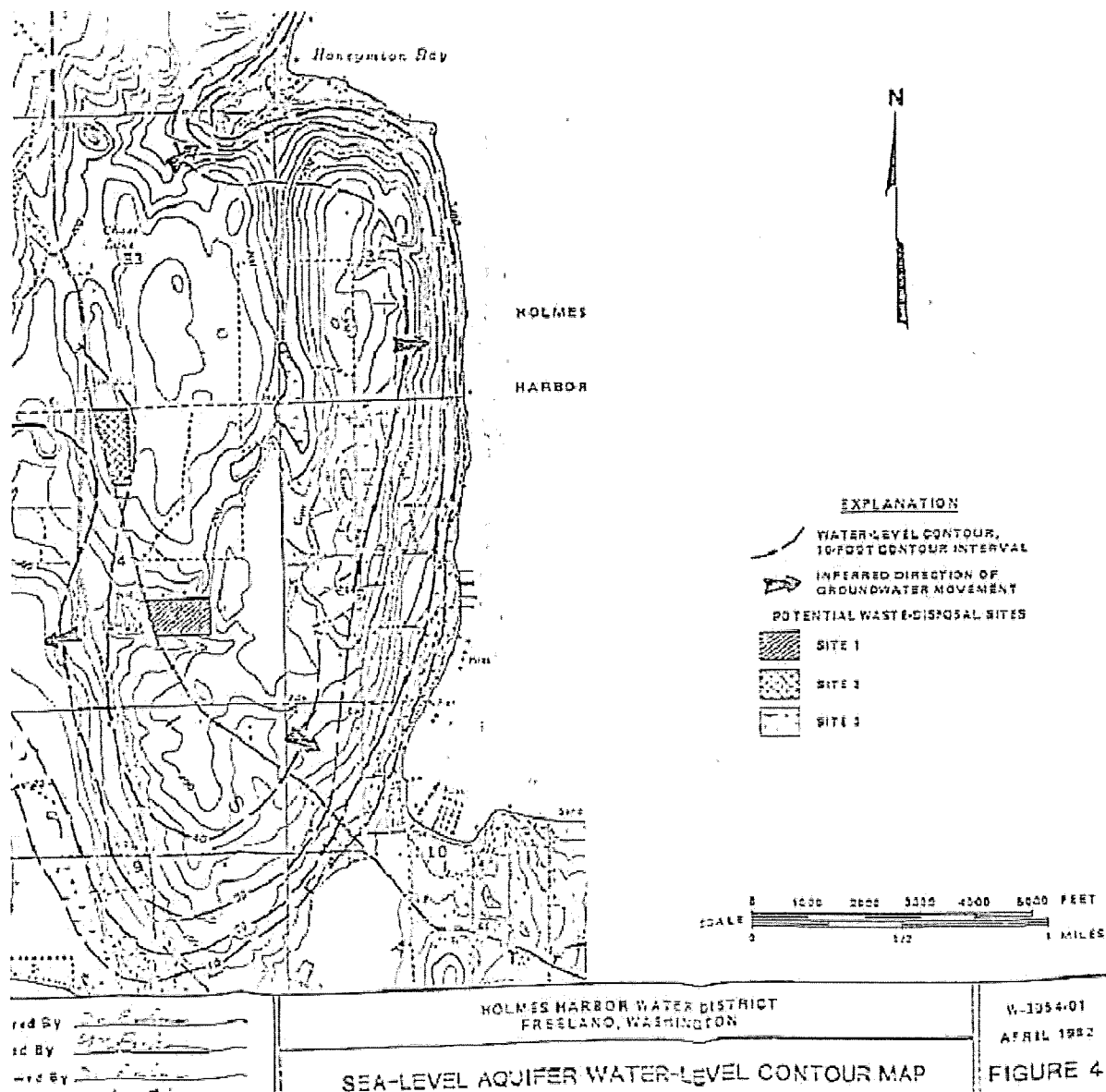
Date(s) aerial images were photographed: 7/21/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Map Unit Legend

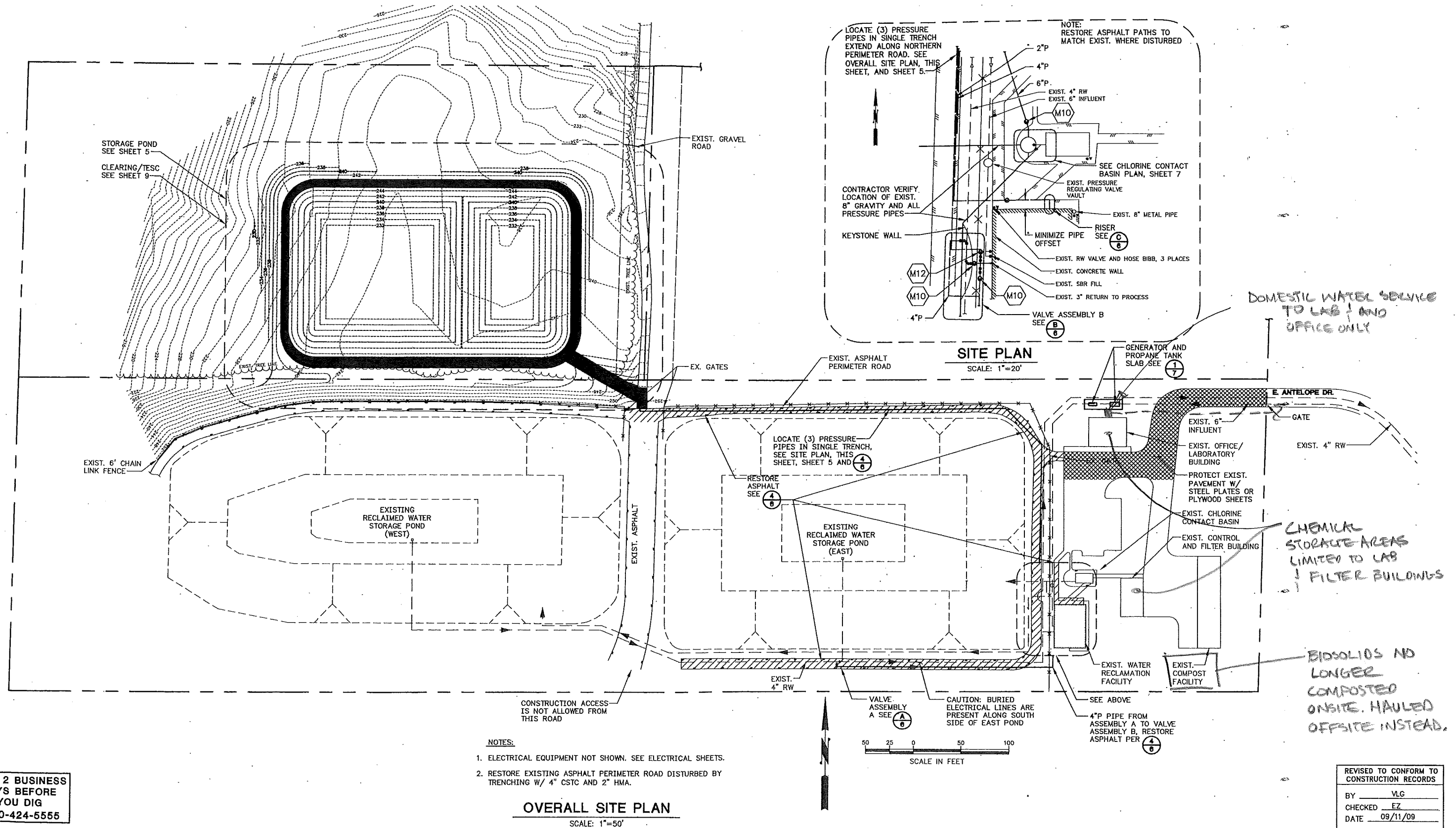
Island County, Washington (WA029)			
Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2012	Elwha-Zylstra-Morancreek, cool, complex, 2 to 12 percent slopes	127.0	80.8%
2013	Zylstra-Frostad complex, 0 to 8 percent slopes	5.5	3.5%
3019	Everett-Alderwood complex, 15 to 40 percent slopes	24.7	15.7%
Totals for Area of Interest		157.1	100.0%

## Appendix E -- Groundwater Flow Map



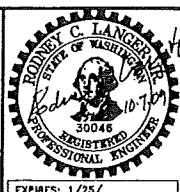
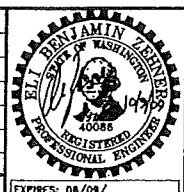


# A PORTION OF SECTION 4, TOWNSHIP 29 NORTH, RANGE 2 EAST, W.M. ISLAND COUNTY WASHINGTON



CALL 2 BUSINESS DAYS BEFORE YOU DIG  
1-800-424-5555

No.	Date	By	Ckd.	Appr.	Revision
3	9/09	VG	EZ	RL	RECORD DRAWINGS
2	7/07	JK	EZ	RL	ISSUED FOR BID
1	4/07	JK	EZ	RL	ISSUED FOR DOE/DOH APPROVAL



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Drawn By	Date	Checked By	Date
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**HOLMES HARBOR SEWER DISTRICT**

Scale:	HorizAS SHOWN	Vert. N/A	Job No.
530506			
<b>WRF WATER STORAGE POND</b>			
<b>OVERALL SITE PLAN</b>			
Sheet <b>4</b>			Of <b>19</b>