



### Main Drain Plan Review Submittal

<input type="checkbox"/> Main Drain Grate Replacement Only <input type="checkbox"/> Main Drain Grate Replacement Plus Additional Modifications	
Describe Project if more than Main Drain Grate Replacement Only:	
Facility Name/Address:	
Specific Pool Involved: (e.g., outdoor swimming pool)	
Owner Name:	Project Contact: <input type="checkbox"/> Architect/Engineer <input type="checkbox"/> Pool Contractor <input type="checkbox"/> Other _____
Address:	Name:
Telephone Number:	Address:
Fax Number:	Phone Number: <span style="float: right;">Fax Number:</span>
Email Address:	Email Address:

### Submittal Instructions

**This submittal will be reviewed for conformance to Chapter 246-260 WAC, which now include the technical design standards of the federal Virginia Graeme Baker Pool and Spa Safety Act. However, conformance to the Washington State regulations may not automatically constitute compliance with the federal Act.** Facilities must comply with the minimum requirements of both state and federal law. The federal agency responsible for implementation and enforcement of the Virginia Graeme Baker Pool and Spa Safety Act is the Consumer Product Safety Commission (CPSC).

**Main Drain Cover Replacement Only (Architect/Engineer Stamp Not Required)**

Submit **two sets** of the following to Spokane Regional Health District:

- Equipment specification sheets for all pumps and main drains. Indicate the manufacturer and model number. Pump specification sheets must include the pump performance curve.
- Main drain checklist (two for each pool being modified). Complete the checklist in its entirety before submitting.

**Main Drain Cover Replacement Plus Additional Modifications (Architect/Engineer Stamp May Be Required – Contact Spokane Regional Health District for a Determination)**

Submit **two sets** of the following to Spokane Regional Health District:

- Equipment specification sheets for all pumps, main drain covers, pump shutoff devices, alarms, equalizer line fittings, etc. proposed for the pool. Indicate the manufacturer and model number. Pump specification sheets must include the pump performance curve.
- Main drain checklist (two for each pool being modified). Complete the checklist in its entirety before submitting.
- Scale cross-sectional views of the pool showing the main drain detail.
- Plan view of the pool, drawn to scale, showing the main drains.
- Detailed schematic of the pool’s current and proposed piping configuration, including pipe sizes, materials, and main drains.

**Contact Spokane Regional Health District (509/324-1560, ext. 4) to determine if additional information is required.**

**Incomplete submittals will not be processed.** Since main drain modifications are not always standard, contact Spokane Regional Health District at (509) 324-1560, ext. 4 to determine if additional information is required. All construction and equipment must comply with the *Washington State Board of Health Rules and Regulations for Water Recreation Facilities, Chapter 246-260 WAC, November 5, 2010*. **Written approval must be obtained from the Spokane Regional Health District before beginning the modifications.**

## Main Drain Plan Review Checklist

<b>Pump Information</b> (Provide/enclose information on all pumps attached to the system)	
<b>Recirculation pump information:</b>  <input type="checkbox"/> new <input type="checkbox"/> existing	Manufacturer:
	Model #
	Horsepower:
	Maximum Capacity with Clean Filter =                      GPM@                      FOH
<b>Jet pump information:</b>  <input type="checkbox"/> new <input type="checkbox"/> existing	Manufacturer:
	Model #
	Horsepower:
	Maximum Capacity =                      GPM@                      FOH

<b>Skimmer Equalizer Line Fitting Information</b> (Provide/enclose information on all NEW fittings)	
<b>Equalizer line fitting information:</b>	Manufacturer:
	Model #
<b>Number of equalizer line fittings:</b>	_____
<b>Equalizer line fittings conform to ASME A112.19.8 standard [WAC 246-260-031(8)(d)(iii)]?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No

<b>Pump Shutoff Device Information</b> (Provide/enclose information on NEW devices)	
<b>Safety Vacuum Release System (SVRS) information:</b>  [WAC 246-260-041(11)(h), WAC 246-260-071(7), WAC 246-260-081(5), WAC 246-260-171(4)]	Manufacturer:
	Model #
	List pump on which SVRS is installed:
<b>Has designer or installer confirmed with SVRS manufacturer that the device is compatible with the pool's hydraulic system?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No Specify:
<b>Alarm information:</b>  Note: Alarm is required with a SVRS	Manufacturer:
	Model #
	Installation location:

<b>Pump Shutoff Device Information</b> (Provide/enclose information on NEW devices)	
<b>SVRS information:</b>  [WAC 246-260-041(11)(h), WAC 246-260-071(7), WAC 246-260-081(5), WAC 246-260-171(4)]	Manufacturer:
	Model #
	List pump on which SVRS is installed:
<b>Has designer or installer confirmed with SVRS manufacturer that the device is compatible with the pool's hydraulic system?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No Specify:
<b>Alarm information:</b>  Note: Alarm is required with a SVRS	Manufacturer:
	Model #
	Installation location:

## Main Drain Information

(Provide/enclose information on NEW main drains and main drain covers)

**Provide information for new main drain covers:**

Main drain cover compliant with ASME A112.19.8 standard?

Yes     No

Manufacturer:

Model #

Sq. in. of opening per drain cover:

Specification sheets provided?     Yes     No

Installation instructions included?     Yes     No

**Provide information for existing main drain sumps:**

Main drain sump construction:     Field Built     Manufactured

Existing main drain sump dimensions compliant with ASME A112.19.8 standard?

Yes     No – explain: \_\_\_\_\_

**Provide information for proposed main drain sumps:**

Use existing sumps

Modify existing sumps – explain:  
\_\_\_\_\_

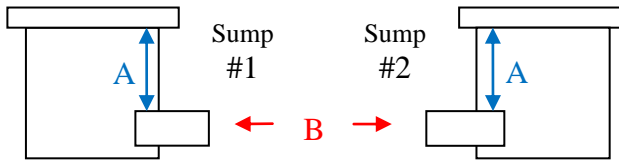
Install commercially manufactured sumps:

Specification sheets provided?     Yes     No

Installation instructions included?     Yes     No

**Main drain sump configuration (as proposed):**

Indicate if piping enters sump through the side



A) Provide distance shown in “A” above - from the top of the pipe with the largest diameter connected to the sump to the bottom of the main drain cover:

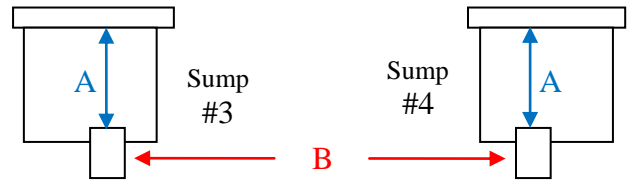
Sump #1 \_\_\_\_\_ inches    Sump #2 \_\_\_\_\_ inches

B) Provide diameter of largest pipe connected to the sump(s):

\_\_\_\_\_ inches

➤ Provide diameters of all other pipes connected to the sump(s):  
\_\_\_\_\_

Indicate if piping enters sump from the bottom



A) Provide distance shown in “A” above - from the top of the tallest pipe connected to the sump to the bottom of the main drain cover:

Sump #3 \_\_\_\_\_ inches    Sump #4 \_\_\_\_\_ inches

B) Provide diameter of largest pipe connected to the sump(s):

\_\_\_\_\_ inches

➤ Provide diameters of all other pipes connected to the sump(s):  
\_\_\_\_\_

AND  
OR

**Maximum water velocity through each main drain at 100% flow [WAC 246-260-031(8)(e)(iii)]:**

(Note: Maximum velocity cannot exceed 1.5 ft. per second at 100% flow. Show calculations in Main Drain Calculations section on page 4.)

\_\_\_\_\_ ft. per second

**Main drains located at least 3 feet apart [WAC 246-260-031(8)(e)(iv)(B)]?**

(Note: As measured between the centers of the drain covers)

Yes

No Distance: \_\_\_\_\_ ft. apart

**Number of Main Drains:**

\_\_\_\_\_

**Main drains designed so that if one drain is blocked, the remaining main drains are rated to at least 100% of maximum pump flow? [WAC 246-260-031(8)(e)(iv)(D)]**

Yes

No – specify: \_\_\_\_\_

**Describe any proposed additional modifications that affect the pool structure or pool hydraulics, including the sump, piping, skimmers, returns, etc.**

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**Note: Any modifications to existing piping require scale drawings and specifications prepared and stamped by an architect or engineer licensed in Washington State. These materials must be submitted to the Health District for formal review and approval prior to construction.**

### Main Drain Calculations

**Main Drain Velocity** (Assume 100% of maximum pump capacity through drains)

$$\frac{\text{Total Pump Capacity (gpm)}}{448.8 \text{ (gpm/cu. ft./sec.)}} \div \frac{\text{Total open area in all* drains (sq. in.)}}{144 \text{ (in./sq. ft.)}} = \text{Main drain velocity (fps)}$$

NOTE: Maximum main drain velocity cannot exceed 1.5 feet per second  
\*Compliance with this WAC does not guarantee compliance with other codes or standards.

Architect/Engineer Signature and Stamp  
if Required:

Prepared and submitted by:

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

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