# City of Seattle Notice of Appointment

Name:		Executive Appointment  Re	appointment				
Richard Martin		Legislative Appointment					
		☐ Agency Appointment					
		☐ PDA Council ☐ PDA Co	nstituency				
Residential	Zip Code:	Contact Phone No.:					
Neighborhood:		(206) 979-1530					
North Beach	98117						
Appointed to:		Date of Appointment:	-				
Urban Forestry Commission	Position #4						
(Hydrologist)	•	January 15, 2015					
Authority (Ord., Res.):		Term of Office:					
		From: January 27, 2015					
S.M.C. 3.14.920		<b>To:</b> December 1, 2017					
experience in the Seattle LLC.  Richard has extensive gravitation of groundwate testing, assessment of graviland groundwater remarks broad project ean asset to the Urban Fo	een stormwater is both the public ter resources, des roundwater/surfamedial systems.	over 24 years of professional concresident of Richard Martin Ground infrastructure experience as it reand private sectors and includes sign and implementation of aquipace water interactions, and evaluate water interactions. He is being appointed to a tention of a term ending December 1.	lates to s fer uation of gy will be rm that				
enas December 1, 2015.	rie is being uppo	inted to a term ending becembe	1 1, 2017.				
Authorizing Signature:		Name and Title of Officer Making Appointments:					
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## Richard Martin Groundwater LLC

### Richard J. Martin, LHG

#### **EDUCATION**

Graduate Studies, Hydrogeology, Wright State University BS, Geology, Wright State University, 1989

#### **REGISTRATION**

Licensed Hydrogeologist: WA, 337, 2002

#### PROFESSIONAL SUMMARY

With over 24 years of experience as a hydrogeologist, Richard has been involved with all aspects of hydrogeologic studies, including evaluation of groundwater resources, design and implementation of aquifer testing, delineation of wellhead protection zones, assessment of groundwater/surface water interactions, evaluation of soil and groundwater remedial systems, and determination of historical contaminant plume movement. He also provides hydrogeologic support for geotechnical projects including development of construction dewatering plans, evaluation of groundwater seepage for slope stability problems, evaluation of soil infiltration capacity for stormwater control design, and estimation of groundwater inflows to tunnels and excavations.

#### **PROJECT EXPERIENCE**

Seattle Parks and Recreation, Jefferson and Densmore Infiltration Feasibility Study, Seattle, WA – 2014 to ongoing. As part of the SVR Design team, Richard performed soil explorations and Pilot Infiltration Tests at the Seattle Parks and Recreation properties at Densmore and Jefferson to support design of Green Stormwater Infrastructure (GSI) facilities at each site. Proposed GSI include a combination of permeable pavement surfaces and bioretention facilities with bioretention at Jefferson to improve water quality and at Densmore for flow attenuation. Based on the results of the exploration and testing program, Richard provided design infiltration rates and recommendations for bioretention depth to enhance infiltration.

Seattle Public Utilities, Ballard and Delridge Green Stormwater Infrastructure Options Analysis, Seattle, WA – 2013 to ongoing. Richard is working with two engineering teams evaluating soil and groundwater conditions, and infiltration capacity for the Ballard and Delridge basins. The goal of the projects is to determine the potential for low impact drainage options to reduce CSO events for the Ballard basin and improve water quality of Longfellow Creek for the Delridge basin. Richard is working with the Delridge team to prepare a geotechnical exploration plan to evaluate infiltration potential and is currently performing groundwater modeling analyses to evaluate potential risks to nearby slopes from increased infiltration.

Seattle Public Utilities, Green Stormwater Infrastructure Program Management, Seattle, WA – 2013 to ongoing. Richard is providing geotechnical and hydrogeological expertise for this contract to support GSI projects throughout the City of Seattle. Richard prepared a geotechnical memorandum describing the recommended approach for mounding analysis on GSI projects. He also coauthored a memorandum describing recommended soil and groundwater exploration and testing for GSI projects with a focus on infiltration testing and evaluation. Both memorandums will be included as part of the City's GSI Manual. Richard recently completed revision of the infiltration testing requirements section for the City of Seattle Stormwater Manual.

King County WTD, Green Stormwater Infrastructure Engineering and Technical Review, King County, Washington – 2013 to ongoing. Richard is a member of a multidisciplinary team to provide engineering and design services for GSI projects throughout King County. Currently, he is working on evaluating infiltration potential for the Highland Park and South Park subbasins in South Seattle. Richard performed subsurface exploration and testing in both areas and recently completed a numerical groundwater mounding analysis of the South Park basin to determine the feasibility of the project moving forward to design phase.

Seattle Housing Authority and Seattle Public Utilities, High Point Redevelopment, Seattle, WA. Richard worked with the Seattle Housing Authority and Seattle Public Utilities on the High Point Redevelopment project in Seattle, Washington. The project involves evaluation of low impact drainage options to control stormwater for an urban housing development using a natural systems modeling approach. This project was competed in collaboration with Seattle Public Utilities through the Comprehensive Drainage Plan contract. Richard evaluated existing soil and groundwater conditions to assess the ability of the site to infiltrate stormwater. He designed and tested a soil mix for drainage swales to enhance infiltration and treatment of stormwater, and convey the treated stormwater from the site. Richard developed a numerical model to evaluate the movement of stormwater through the engineered soil and estimate the rate of inflow to the conveyance system as a function of the percent of vertical saturation of the soil. He also assisted in development of technical specifications for the engineered soil mix.

King County, Regional Infiltration/Inflow (I/I) Control Program, King County, WA. Richard worked with the project team to evaluate groundwater conditions associated with I/I reduction pilot projects. The evaluation includes identifying groundwater in the vicinity of the pilot projects for both infiltration and construction dewatering purposes, evaluating whether reducing infiltration can increase slope instability, identifying aquifers that capable of safely accepting recharge when inflow is diverted, and identifying aquifers that provide baseflow to streams.

King County, Regional Detention Facility (RDF), Des Moines, WA. Richard was Project Hydrogeologist for design of a liner for the base of the stormwater retention facility to prevent mobilization of arsenic into the surface water of Des Moines Creek, a salmon bearing stream. The RDF is one of the major components of a series of projects being implemented by the Des Moines Creek Basin Planning Committee to protect and restore Des Moines Creek. During design phase environmental sampling, elevated levels of arsenic were identified in the proposed excavation areas. Richard developed a preliminary construction dewatering design to provide estimates of groundwater discharge rates. Because of the arsenic, discharge of the dewatering effluent is critical for the project and Richard worked with the project team to identify cost-effective and constructible approaches for handling the water, including a phased construction dewatering design.

Seattle Center, Former Metro Bus Barn Site Investigation and Remedial Design, Seattle Center, Seattle, WA. Richard was Project Hydrogeologist and Site Investigation Manager for this fast-track remediation project at the future site of the Gates Foundation headquarters. The site is a former bus maintenance and fueling facility and a benzene plume in groundwater was discovered beneath the site. Richard reviewed previous work completed at the site and developed a focused site investigation, which included using geoprobes to identify potential source areas, installing an array of monitoring wells to identify the extent of the plume, completing groundwater monitoring and hydraulic testing to assess contaminant movement, and installing test wells for a pilot-scale air sparging and soil vapor extraction system. The results of the site investigation led to development of a full-scale remediation system design for the site, which is expected to reduce benzene concentrations in groundwater to target levels within the project time frame.

#### **PUBLICATIONS/PRESENTATIONS**

"Analysis of Artificial Recharge of the Highline Aquifer System" by R.J. Martin, <u>Proceedings</u>, The 2<sup>nd</sup> Symposium on the Hydrogeology of Washington State, Olympia, Washington, 1997.

"Simulation of Groundwater Flow and Solute Transport Around the Milwaukee Waterway Confined Disposal Facility" by R.J. Martin and R. Gilmur, <u>Proceedings</u>, The 2<sup>nd</sup> Symposium on the Hydrogeology of Washington State, Olympia, Washington, 1997.

"Impacts of Barometric Pressure on Groundwater Levels During Pumping Tests in the Seattle Area" by C.D. Sauer and R.J. Martin, <u>Proceedings</u>, The 3<sup>rd</sup> Symposium on the Hydrogeology of Washington State, Tacoma, Washington, 2000.

"Analysis of Ground Water Conditions Along the Seattle Waterfront", <u>Presentation</u> given at the National Ground Water Association FOCUS Conference on Pacific Northwest Ground Water Issues, Anchorage, Alaska, 2003.

"Dewatering Design and Implementation for the Sound Transit Beacon Hill Station Tunnel, Seattle, Washington" by K.E. Stalker and R.J. Martin, <u>Proceedings</u>, The 6<sup>th</sup> Symposium on the Hydrogeology of Washington State, Tacoma, Washington, 2007.

"Beacon Hill Station Dewatering Wells and Jet Grouting Program" by Z. Varley, R. Martin, R. Robinson, P. Schmall, and D. Parmantier, Proceedings, Rapid Excavation and Tunnel Conference, Toronto, Canada, 2007.

#### **LECTURES**

Invited lecturer on <u>Contract Documents for Hydrogeologic Aspects of Projects</u> for the American Society of Civil Engineers Seattle Section Geotechnical Group Spring Seminar, April 20, 2013.

Invited lecturer (2 sessions) on <u>Computer Modeling</u> and <u>Contaminated Sites</u> for the American Society of Civil Engineers Dewatering Short Course, November 13-14, 2008.

## **Urban Forestry Commission**

JANUARY 2015

*Ten (10) Commission* members: Per S.M.C. 3.14.920, all subject to City Council confirmation, *3*-year terms. The Get Engaged members serve 1-year terms.

- 4 Appointed by City Council
- 4 Appointed by Mayor
- 1 Appointed by the Commission
- 1 Get Engaged Member

D*	G	Position No.	Name	Appointed	Term Ends	Term #	Position	Appoint ed By
6	M	1	Steve Zemke	2-18-14	12-1-16	1 <sup>st</sup>	1: Wildlife Biologist	Council
6	F	2	Donna Kostka	4-28-14	12-1-16	1st	2: Urban Ecologist	Mayor
6	М	3	Dr. Gordon Bradley	12-1-09	12-1-15	2 <sup>nd</sup>	3: Natural Resource Agency or University Representative	Council
3	М	4	Richard Martin	01-27-14	12-1-17	1 <sup>st</sup>	4: Hydrologist or Similar Professional	Mayor
6	M	5	Leif Fixen	5-23-12	12-1-14	1st	5: Arborist	Council
6	M	6	Tom Early	7-8-11	12-1-14	1 <sup>st</sup>	6: Landscape Architect	Mayor
6	F	7	Joanna Nelson de Flores	6-16-14	12-1-15	1st	7: NGO Representative	Council
6	M	8	Jeff Reibman	11-2-09	12-1-15	2 <sup>nd</sup>	8: Development Community or Utility Representative	Mayor
6	М	9	Erik Rundell	2-11-14	12-1-16	1 <sup>st</sup>	9: Economist, Financial Analyst, Realtor or Similar Professional	Commis sion
		10	Vacant				10: Get Engaged Member	Commis sion

### \*Diversity

	-				(1)	(2)	(3)	(4)	(5)	(6)
	Men	Women	Vacant	Minority	Asian- American	African- American	Hispanic Latin@	Native- American	Other**	Caucasian
Mayor	3	1	0	1	1	0	0	0	0	3
Council	3	1	0	0	0	0	0	0	0	4
Other Bodies	1	0	1	0	0	0	0	0	0	1
Total	7	2	1	1	1	0	0	0	0	8

<sup>\*</sup>Other includes diversity in any of the following: race, gender and/or ability