



KING COUNTY

1200 King County Courthouse
516 Third Avenue
Seattle, WA 98104

Signature Report

September 11, 2017

Motion 14947

Proposed No. 2017-0288.2

Sponsors Balducci

1 A MOTION acknowledging receipt of the Factoria
2 recycling and transfer station workforce diversity final
3 report required by Ordinance 17830, Section 2.

4 WHEREAS, Ordinance 17830, Section 2 states that by June 30, 2017, a final
5 workforce diversity report that describes the results of efforts undertaken to ensure
6 participation by minority-owned businesses and women-owned businesses in the
7 construction of the Factoria recycling and transfer station shall be submitted, and

8 WHEREAS, the final report is submitted by the department of natural resources
9 and parks, solid waste division, to fulfill this requirement;

10 NOW, THEREFORE, BE IT MOVED by the Council of King County:

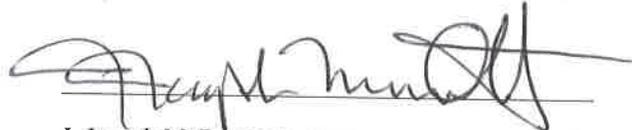
11 The receipt of the Factoria recycling and transfer station workforce diversity final

12 report, Attachment A to this motion, as required by Ordinance 17830, Section 2, is
13 hereby acknowledged.
14

Motion 14947 was introduced on 7/17/2017 and passed by the Metropolitan King County Council on 9/11/2017, by the following vote:

Yes: 8 - Mr. Gossett, Ms. Lambert, Mr. Dunn, Mr. McDermott, Mr. Dembowski, Mr. Upthegrove, Ms. Kohl-Welles and Ms. Balducci
No: 0
Excused: 1 - Mr. von Reichbauer

KING COUNTY COUNCIL
KING COUNTY, WASHINGTON



J. Joseph McDermott, Chair

ATTEST:



Melani Pedroza, Clerk of the Council

Attachments: A. Factoria Recycling and Transfer Station Workforce Diversity Report - August 11, 2017



UPDATED 8-11-17

Factoria Recycling and Transfer Station Workforce Diversity Report

Prepared in accordance with
Ordinance 17830

June 2017



King County

Department of Natural Resources and Parks
Solid Waste Division

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Introduction

King County Ordinance 17830, Section 2 requires the King County Executive to transmit a report to the Council that reviews the contractor's workforce and use of Minority and Women's Business Enterprises (M/WBE) on the Factoria Recycling and Transfer Station project.

In fulfillment of the requirements of Ordinance 17830, approved by the King County Council on June 13, 2014, the Solid Waste Division of the Department of Natural Resources and Parks reviewed the contractor's workforce and use of M/WBE on the Factoria Recycling and Transfer Station project. This report is based on data and other input from the Business Development and Contract Compliance (BDCC) section of the Office of Executive Services from project start up in September 2014 through March 2017, when the project achieved 90 percent completion.

Specifically, the Ordinance requires:

1) Minority-owned and women-owned firms:

- Identify the proportion of:
 - minority-owned businesses participating as contractors on the project, against the 10 percent minority business enterprise project goal, and
 - women-owned businesses participating as contractors on the project against the six percent women-owned business enterprise project goal.
- Describe efforts to overcome obstacles and reasons for any shortfall in meeting goals, and
- Provide recommendations for achieving the identified participation goals of M/WBE firms in future transfer station Capital Improvement Project (CIP) projects.

2) Minorities and women in the contractor's workforce:

- Describe the participation levels of minorities and women in the contractor's workforce on the project.
- Identify reasonable participation levels for women and minorities based on workforce availability and regional demographic representation levels.
- Make recommendations for achieving reasonable participation levels for women and minorities in future transfer station CIP projects.

3) Minority and women apprentices:

- Identify the proportion of:
 - first year apprentice hours in all trades on the project against the 50 percent goal for first year apprentices,
 - hours worked by minority apprentices in comparison to the 21 percent goal for minority apprentices, and
 - hours worked by women apprentices in comparison to the 12 percent goal for women apprentices.
- Describe the substance of the good faith efforts undertaken to achieve these goals, and any obstacles encountered in achieving them.

- Make recommendations for achieving reasonable participation levels on future transfer station CIP projects.

This report addresses each requirement under a separate heading that corresponds to the particular requirement, with recommendations for achieving participation goals in the three categories consolidated at the end of the report.

Executive Summary

With roughly 10 percent of the project remaining, Factoria Recycling and Transfer Station construction is on track to approach the goal of utilizing 10 percent minority-owned businesses and falls one percent short of the six percent woman-owned business contracting goal.

Based on workforce availability voluntary Workforce Participation goals for minorities and women were set at 25 percent and six percent, respectively. The Factoria workforce slightly surpasses these values, with 28 percent minorities and six percent women.

Given the available supply of registered first-year apprentices, the goal for 50 percent of apprentice hours to be worked by first-year apprentices is difficult to achieve. The proportion of total apprentice hours worked by minorities was 33 percent – significantly higher than the 21 percent goal. The proportion of total apprentice hours worked by women was seven percent. While this is less than the goal of 12 percent, it is higher than the demographic representation of women in the local construction industry overall.



Participation of M/WBE Business Enterprises

This section deals with the ownership of businesses that were contracted to work on the project. The project set a 25 percent requirement for the use of King County-certified small contractors and suppliers (SCS) firms and voluntary goals for the participation of minority business enterprises and women business enterprises of 10 percent and six percent respectively.

Based on the Statements of Intent to Pay Prevailing Wages (Intent) and Affidavit of Wages Paid (Affidavit) Public Works contract forms filed with the Washington State Department of Labor and Industries (L&I); and on data entered into the County's Contracts and Apprenticeship Reporting and Tracking System by the prime contractor, including the dates identified for work to begin, the overall participation rates for minority-owned and SCS firms are anticipated to meet or exceed participation goals for this project.

Participation rates of the project of M/WBE businesses at the time of reporting compared to project voluntary goals are shown in Table 1. Participation rates shown are based solely on actual dollars already paid to M/WBE and SCS firms as of March 31, 2017, rather than on subcontract amounts. As a result, most values in Table 1 are slightly lower than the final contracted values that will be paid out at project completion. Work contracted but not completed before March 31, 2017 will increase minority participation rates to 8 percent and increase women participation rates over five percent. At the time this report was written to meet a June 30, 2017 due date, only information through March 31, 2017 was available to be analyzed. Further data through May 31, 2017 will be available upon request.

Table 1 – Current Participation Rate of M/WBEs and Small Contractors and Suppliers Compared to Participation Requirements and Goals

Factoria Recycling and Transfer Station project				
Actual Dollars Paid				
(Report Period Ending March 31, 2017)				
	Dollars Paid	Participation Rate	Voluntary Goals	Required Participation
Prime Contractor	\$44,776,223	90.2%		
Minority Business Enterprises	\$3,180,310	7.1%	10%	
Women Business Enterprises	\$2,204,484	4.9%	6%	
Small Contractors and Suppliers	\$11,334,412	25.3%		25%

Current participation rates for M/WBE and SCS firms is shown as a percent of dollars paid to the Prime Contractor. Amounts shown in this table are not additive and do not total 100%.

Table 2 illustrates in greater detail subcontracted work for which the prime contractor has filed an Intent with L&I to be performed by M/WBE and SCS firms on this project. Based on this data, the prime contractor will meet or exceed the 25 percent participation goal for SCS firms.

Table 2 – Subcontracted Work to M/WBE and SCS Firms by work start date
(Period ending March 31, 2017)

Contractors not certified SCS are also listed to show full scope of the project contractors						
Firm Name	Certification Status (Small Contractor Supplier)	Intent to Pay Amount	Work Start Date	MBE	WBE	SCS
Design Air Ltd.	Not Certified	\$1,005,400.00	1-Aug-14			
Oldcastle Precast Inc.	Not Certified	\$77,887.00	4-Aug-14			
Axis Survey & Mapping	Certified	\$110,400.00	11-Aug-14			x

Firm Name	Certification Status (Small Contractor Supplier)	Intent to Pay Amount	Work Start Date	MBE	WBE	SCS
WENK Acquisition Company LLC, DbA North Pacific Industrial Coatings	Certified	\$65,000.00	2-Sep-14			X
KLB Construction, Inc.	Not Certified	\$11,139,611.00	2-Sep-14			
North Pacific Industrial Coatings LLC	Not Certified	\$65,000.00	2-Sep-14			
Utility Vault	Not Certified	\$15,078.00	8-Sep-14			
Valley Electric Company	Not Certified	\$4,104,626.00	8-Sep-14			
Harvard Steel, A Division Of Harris Rebar Seattle Inc.	Not Certified	\$1,118,283.00	22-Sep-14			
C & P Fencing	Certified	\$57,635.00	23-Sep-14			X
JMR Trucking Inc.	Certified	\$3,885.00	24-Sep-14	X		X
Titan Earthwork, LLC	Not Certified	\$167,200.00	24-Sep-14			
Pro USA LLC	Certified	\$0.00	1-Oct-14	X		
Holt Services Inc.	Not Certified	\$54,319.67	1-Oct-14			
Grady Excavating Inc.	Certified	\$350,000.00	7-Oct-14		X	X
Yonemitsu Geological Services	Certified	\$89,025.00	13-Oct-14	X		
Central Steel, Inc.	Not Certified	\$437,176.00	15-Oct-14			
Profile Steel Inc.	Not Certified	\$561,555.00	27-Oct-14			
Olympic Concrete Finishing Inc.	Not Certified	\$0.00	3-Nov-14			
Salinas Sawing & Sealing Inc.	Certified	\$1,500.00	4-Nov-14	X		
Bravo Environmental NW Inc.	Not Certified	\$0.00	20-Nov-14			
Precision Iron Works	Certified	\$1,896,197.00	24-Nov-14			X
Malcolm Drilling Company, Inc.	Not Certified	\$1,290,530.00	24-Nov-14			
D & G Mechanical	Not Certified	\$21,551.00	1-Dec-14			

Firm Name	Certification Status (Small Contractor Supplier)	Intent to Pay Amount	Work Start Date	MBE	WBE	SCS
Insulation, Inc.						
Purcell P & C, LLC	Not Certified	\$463,900.00	1-Dec-14			
Cadman Inc.	Not Certified	\$0.00	11-Dec-14			
Construction Specialties Inc.	Not Certified	\$22,960.00	31-Dec-14			
Marine Vacuum Service Inc.	Certified	\$19,075.00	1-Jan-15	X		X
O'Neill Service Group, LLC	Certified	\$31,200.00	1-Jan-15	X		X
Castle Walls Inc.	Certified	\$137,922.00	1-Jan-15			X
Materials Testing & Consulting, Inc.	Certified	\$0.00	1-Jan-15			X
QCC Quality Controls Corp	Certified	\$222,992.00	1-Jan-15			X
Afghan Associates Inc.	Not Certified	\$0.00	1-Jan-15			
Empire Protection & Safety LLC	Not Certified	\$0.00	1-Jan-15			
J.P. Francis & Associates, Inc.	Certified	\$3,445,825.00	5-Jan-15	X		X
Coral Construction Company	Not Certified	\$49,977.00	6-Jan-15			
Davidson Macri Sweeping, Inc.	Not Certified	\$0.00	12-Jan-15			
Absco Alarms	Not Certified	\$37,420.00	20-Jan-15			
Mulier Construction, LLC	Certified	\$0.00	25-Jan-15			X
Northwest Asphalt Inc.	Certified	\$356,795.00	25-Jan-15			X
Aluma Systems Concrete Construction	Not Certified	\$280,916.95	24-Feb-15			
Penhall Company	Not Certified	\$5,000.00	24-Feb-15			
Lacey Glass, Inc.	Certified	\$675,090.00	1-Mar-15			X
Brundage Bone Concrete Pumping Inc.	Not Certified	\$10,000.00	1-Mar-15			
K S I Transport	Not Certified	\$0.00	1-Mar-15			
Northwest Traffic Inc.	Not Certified	\$22,096.30	1-Mar-15			
Zesbaugh	Not Certified	\$96,420.00	1-Mar-15			
Inland Waterproofing	Not Certified	\$76,000.00	23-Mar-15			

Firm Name	Certification Status (Small Contractor Supplier)	Intent to Pay Amount	Work Start Date	MBE	WBE	SCS
Service						
Civil Tech Corporation	Not Certified	\$3,635.00	30-Apr-15			
Columbia Fire, Inc.	Certified	\$420,485.00	1-May-15			X
Fire Chief Equipment	Not Certified	\$16,294.00	1-May-15			
Holocene Drilling, Inc.	Certified	\$11,360.90	20-May-15			X
American Transport, Inc.	Not Certified	\$13,100.00	25-May-15			
Conco Pumping	Not Certified	\$0.00	1-Jun-15			
Almanza Trucking LLC	Not Certified	\$3,900.00	3-Jun-15			
Ness Cranes Inc.	Not Certified	\$10,370.20	4-Jun-15			
Siemens Industry Inc.	Not Certified	\$204,500.00	8-Jun-15			
Cascade Steel Inc.	Not Certified	\$678,560.00	10-Aug-15			
Imhoff Crane Service Inc.	Not Certified	\$26,981.00	10-Aug-15			
Magnum Crane Services, LLC	Certified	\$75,786.32	24-Aug-15	X		X
Queen City Sheet Metal & Roofing Inc.	Certified	\$118,765.00	1-Sep-15		X	
Enderis Company	Not Certified	\$480,000.00	1-Sep-15			
Harris Waste Management Group Inc.	Not Certified	\$2,714,600.00	1-Sep-15			
Recycle Systems LLC	Not Certified	\$162,060.00	1-Sep-15			
T-Town Construction	Not Certified	\$1,013.00	1-Sep-15			
Crawford Door Company LLC	Not Certified	\$147,534.00	3-Sep-15			
Rsb Construction Inc.	Certified	\$1,809,549.00	15-Sep-15			X
Automated Equipment Company	Not Certified	\$60,377.00	15-Sep-15			
Ralphs Concrete Pumping	Not Certified	\$0.00	24-Sep-15			
Gary Merlino Construction Co Inc.	Not Certified	\$1,308,120.00	5-Oct-15			
E-Z Interface	Not Certified	\$46,328.00	10-Oct-15			

Firm Name	Certification Status (Small Contractor Supplier)	Intent to Pay Amount	Work Start Date	MBE	WBE	SCS
Engineered Products, A Pape Company	Not Certified	\$9,910.00	15-Oct-15			
Olson Brothers Excavating	Not Certified	\$797.50	22-Oct-15			
Olson Brothers Trucking	Not Certified	\$2,138.75	22-Oct-15			
Insulation Contractors Inc.	Not Certified	\$19,347.00	23-Oct-15			
United Professional Caulking & Restoration Inc.	Certified	\$167,542.01	26-Oct-15	X	X	X
Earthscapes Nw, Inc.	Certified	\$1,670,826.00	1-Nov-15			X
Dpl Construction, Inc.	Certified	\$21,717.00	1-Dec-15			X
Genothen Holdings LLC	Not Certified	\$88,915.00	1-Dec-15			
Forrest Sound Products, LLC	Not Certified	\$6,983.00	15-Dec-15			
Rubensteins Contract Carpet LLC	Not Certified	\$39,620.00	16-Dec-15			
North American Terrazzo	Not Certified	\$20,000.00	17-Dec-15			
Starr Installation, Inc.	Not Certified	\$4,360.00	30-Dec-15			
Shiplely Specialties LLC	Certified	\$5,727.64	1-Jan-16		X	X
Barclay Dean Architectural Products	Not Certified	\$10,385.00	1-Jan-16			
Washington Architectural Hardware	Not Certified	\$132,813.00	1-Jan-16			
Zev Oved DbA Icon Specialty Construction LLC	Not Certified	\$21,874.00	4-Jan-16			
Insta-Pipe Inc.	Not Certified	\$32,300.00	5-Jan-16			
Caseworks Install Inc.	Not Certified	\$7,380.00	7-Jan-16			
Neudorfer Engineers Inc.	Not Certified	\$23,121.00	10-Feb-16			
Ventilation Power Cleaning, Inc.	Certified	\$0.00	26-Feb-16			X
Robbins & Co. House Moving	Certified	\$59,112.42	1-Mar-16		X	
Contemporary Home Services	Certified	\$8,980.00	16-Mar-16		X	X

Firm Name	Certification Status (Small Contractor Supplier)	Intent to Pay Amount	Work Start Date	MBE	WBE	SCS
Inc.						
North Creek Environmental LLC	Not Certified	\$1,760.00	25-Mar-16			
W B Sprague Co Inc.	Not Certified	\$91,000.00	1-Apr-16			
SME Solutions LLC	Not Certified	\$0.00	14-Apr-16			
Ben's Dozer Services, Inc.	Not Certified	\$910.00	22-Jun-16			
Lumenomics Inc.	Not Certified	\$19,885.00	14-Jul-16			
Donald B Murphy Contrs Inc.	Not Certified	\$40,000.00	25-Jul-16			
Ascendent, LLC	Certified	\$3,100.00	29-Aug-16			X
Frank Coluccio Construction, Inc.	Not Certified	\$0.00	26-Sep-16			
Corona Stud & Deck, LLC	Not Certified	\$6,363.00	4-Nov-16			
Applied Organics, Inc.	Not Certified	\$10,000.00	20-Feb-17			
Total Dollar Amount Subcontracted:						\$39,425,633.66

The executed contract amount for this project is \$49,649,999. Of this amount, the current total dollar amount subcontracted is \$39,425,634 or 79 percent.

Table 3 shows the breakout of subcontracted dollars to M/WBE businesses and to small contractors and suppliers by certification type through the report period. In some cases, actual spending to certified subcontractors exceeded the initial contract amounts shown below.

Table 3—Awarded Subcontract Dollars to M/WBE and SCS Firms by Certification Type

*Breakout by Certification Type (Period ending March 31, 2017)		
MBE	WBE	SCS
\$ 3,833,838	\$ 710,127	\$ 11,567,090
8%	1%	23%

*Percent of subcontract amount is based on the executed contract amount of \$49,649,999

Minority-owned Contractors

Participation of minority business enterprises for this project has increased since the submission of the interim report. In 2015, minority-owned businesses were only 3.2 percent of contractors on the project. At the time of reporting, minority-owned businesses had reached seven percent. When all contracted work is completed, the project is on track to approach the 10 percent goal.

Women-owned Contractors

An "Intent to Pay Prevailing Wage" was filed by the project's prime contractor for Grady Excavating Inc., a woman-owned firm, for \$350,000 in October 2014. Since that time, actual payments to this subcontractor total more than \$2 million dollars. As a result, the overall project participation for women-owned firms is approximately five percent. Although one percent lower than the participation goal of six percent, this marks a significant improvement over the interim participation rate of zero. It is also a significant increase over the two percent that was initially contracted.

Contractor's Efforts to Achieve Goals for M/WBE Participation

Throughout the contract duration, the prime contractor made efforts to achieve the contract participation goals for M/WBE and SCS firms to perform work on the project. These efforts included outreach to identify, engage, and inform potential M/WBE firms of upcoming contracting opportunities for the project. The prime contractor's efforts included the following events:

- April 12, 2017 – *Regional Contracting Forum*. PCL Construction participated in this annual event's one-on-one sessions that provide prime contractors with opportunities to meet directly with small businesses and minority-owned and woman-owned contractors and suppliers who have an interest in doing business with their companies. Prime contractors are provided a list of pre-scheduled interviews with small contractors for this highly anticipated annual event.
- Nov. 2, 2016 – *North Puget Sound Small Business Summit*. PCL Construction attended this event as one of several prime contractors that offer and/or support diversity/small business programs. This summit is designed to provide educational and networking opportunities with public, private, and business resources to small businesses. Small businesses and organizations were encouraged to attend and participate in this summit to find new business contacts.
- May 26, 2016 – *3rd Annual Hire-A-Vet Job Fair*. This annual event is a partnership between the Washington State Convention Center, the King County Veterans' Program, and WorkSource Seattle-King County. PCL participated in the event.
- May 6, 2016 – *Women in Trades Career Fair*. PCL Construction attended this annual event as one of over 80 information exhibitors. Washington Women in Trades has created a place where over 1,000 people gather to teach, learn, recruit, apply for jobs, and hire persons interested in the construction trades.
- May 5, 2016 – *Blue Book NW Event*. This event provides access to commercial construction trade-leaders, exclusive projects, and helpful business strategies for both large and small contractors. PCL participated in the event.
- April 28, 2016 - *WSDOT Olympic Region Contracting Workshop*. PCL Construction participated in this event as an information exhibitor. The event highlighted upcoming work

with a focus on helping to build connections between local contractors and small businesses and minority-owned and woman-owned businesses.

- March 5, 2015 – To promote its support for Women in Construction Week, PCL Construction hosted a Women in Construction event for the National Association of Women in Construction (WIC) at its main office in Bellevue, WA. Women in Construction Week provides a time for more than 5,500 WIC members to raise awareness of the opportunities the construction industry holds for potential employees and to highlight women as a visible, growing force in the industry. This event included both interactive and informal sessions on a variety of topics related to women in construction careers, including personal strategic business planning for women project engineers and managers and a discussion of challenges women encounter working in the construction industry.
- March 4, 2015 – PCL hosted a semi-annual small and disadvantaged business enterprise outreach and networking event. The marketing and communication efforts targeted small businesses and minority-owned and woman-owned businesses. During the event the prime contractor discussed the anticipated breakdown of bid packages and upcoming contracting opportunities. Staff from the Washington State Office of Minority and Women’s Business Enterprises (OMWBE) also attended to provide a presentation on the state certification process for M/WBE certification, and to address questions related to this subject.
- PCL Construction continues to post advertisements on the state of Washington OMWBE website to provide information about this and other projects and available scopes of work.

Minorities and Women in the Contractor’s Workforce

Workforce Participation Levels

This section deals with the workforce hired by contractors on the project. Table 4 reports project labor hours performed by gender and ethnicity. Compared to results in the interim report, participation by both minorities and women has increased by four percent. Minority participation went from 24 percent to 28 percent and women’s participation increased from two percent to six percent. The goals we set for Workforce Participation were voluntary and levels and results were different than goals for M/WBE.

Table 4 Project Labor Hours by Gender and Ethnicity
(Period ending March 31, 2017)

	Hours	%
Male		
Male minorities	44,494	26%
White male	118,246	68%
Total Male	162,740	94%
Female		
Female minorities	3,561	2%
White female	6,421	4%
Total Female	9,982	6%
Total Minorities	48,055	28%
Total Labor	172,722	100%

Reasonable Participation Levels

Unlike the formal M/WBE goals, the goals for Workforce Participation by minorities and women were voluntary for this project. The ordinance required this report to identify reasonable participation levels for women and minorities based on workforce availability and regional demographic representation levels.

For the purpose of this report the region has been identified as King, Pierce, and Snohomish counties. Data from King County's Construction Workforce Analysis Report (December 2015) was used to determine workforce availability. The number of construction workers employed in the region in 2015 was estimated to be 76,000. Within King County, 94 percent of all construction workers are male and six percent of construction workers are female. Furthermore, 76 percent of the construction workforce in King County identifies as white. The second largest racial demographic category identifies as solely Asian, accounting for eight percent of the construction workforce. Black or African American construction workers constitute four percent of the total construction workforce. Based on this data, reasonable participation levels on construction projects for minorities is estimated at 25 percent and for women at six percent. This project has achieved those levels.

Apprentices

This section relates to apprentices performing work on the project. The number of first-year apprentices, minority apprentices, and women apprentices is reported.

First Year Apprentice Hours

The goal for this project was for 50 percent of all apprentice hours in all trades to be performed by first-year apprentices. This is the same goal used for the Brightwater Treatment Plant Construction Project, but given the size of this project (which is much smaller than Brightwater) and the currently limited available supply of registered apprentices due to the high level of construction in the region, this goal was difficult to meet for this project. Table 5 shows first-year apprentice participation for all trades on the project. In some trades, such as brick layer, construction equipment operator, and drywall finisher, first-year apprentices performed more than half of all hours. In other trades, such as construction electrician and tile finisher, more than half of apprentices were first-year apprentices even though they did not perform half of the work. Overall, first-year apprentices performed 36.4 percent of all apprentice-hours on the project.

**Table 5 – First Year Apprentice Hours by Trade
(Period ending March 31, 2017)**

TRADE:	Participation Levels of all First Year Apprentices					
	HOURS			NUMBER		
	1 st Year Apprentice	All Apprentice	%	1 st Year Apprentice	All Apprentice	%
Brick Layer	62	106	58.5%	1	2	50.0%
Carpenter	982	5708	17.2%	5	19	26.3%
Carpenter, Scaffold Erector	0	88	0.0%		1	0.0%
Cement Mason	552	1015	54.3%	5	13	38.5%
Constr Equip Operator	2664	4347	61.3%	3	4	75.0%
Construction Electrician	24	24	100.0%	1	1	100.0%
Drywall Finisher	38	40	95.0%	1	1	100.0%
HVAC Service Tech	118	118	100.0%	1	1	100.0%
Inside Wire-man	398	6247	6.4%	4	17	23.5%
Ironworker	625	3106	20.1%	7	32	21.9%
Laborer	1459	4984	29.3%	13	24	54.2%
Lathing Acoustical Drywall Systems Installer	4	541	0.7%	1	4	25.0%
Limited Energy/Sound & Comm Tech	0	6	0.0%		1	0.0%
Low Energy/Sound & Comm	96	96	100.0%	1	1	100.0%
Marine/Industrial/Coating and Lining Specialist Painter	0	566	0.0%		1	0.0%
Painter and Decorator	53	107	49.3%	1	1	100.0%
Pipefitters	559	559	100.0%	1	1	100.0%
Plumber	71	916	7.7%	1	4	25.0%
Pointer/Cleaner/Caulker	0	31	0.0%		1	0.0%
Sheet Metal Worker	1875	2100	89.3%	9	13	69.2%
Sprinkler Fitter	144	478	30.2%	2	5	40.0%
Tile/Terrazzo/Marble Finisher	52	152	34.2%	1	2	50.0%
Tile-setter	62	128	0.0%	1	1	0.0%
Total	1,044	31,459	36.4%	58	150	38.7%

Although the total participation of first-year apprentices will not reach the 50 percent goal, the project did reach an exemplary level of participation from first-year minority and woman apprentices. Table 6 shows just over 30 percent of first year apprentice hours were performed by minorities (better than the 25 percent representation in the local construction industry) while 6.3 percent of first-year apprentice hours were performed by women (slightly more than the six percent in the local construction industry).

**Table 6 – Proportion of First Year Minority and Women Apprentice Hours in all Trades
(Period ending March 31, 2017)**

Trade	All Apprentices				First Year Women			First Year Minorities		
	Total Hours	Total First Year Hours	% of Total Hours	Total #	*Hours	%	Total #	*Hours	%	Total #
Brick Layer	106	62	58.5%	2	0	0.0%	0	0	0.0%	0
Carpenter	5,708	982	17.2%	19	16	1.6%	1	928	94.5%	2
Carpenter, Scaffold Erector	88	0	0.0%	1	0	0.0%	0	0	0.0%	0
Cement Mason	1,015	552	54.3%	13	141	25.6%	1	185	33.5%	2
Constr Equip Operator	4,347	2,664	61.3%	4	0	0.0%	0	5	0.2%	1
Construction Electrician	24	24	100.0%	1	0	0.0%	0	0	0.0%	0
Drywall Finisher	40	38	95.0%	1	0	0.0%	0	38	100.0%	1
HVAC Service Tech	118	118	100.0%	1	0	0.0%	0	0	0.0%	0
Inside Wire-man	6,247	398	6.4%	17	174	43.7%	1	0	0.0%	0
Ironworker	3,106	625	20.1%	32	0	0.0%	0	270	43.2%	3
Laborer	4,984	1,459	29.3%	24	223	15.3%	2	662	45.4%	5
Lathing Acoustical Drywall Systems Installer	541	4	0.7%	4	0	0.0%	0	4	100.0%	1
Limited Energy/Sound & Comm Tech	6	0	0.0%	1	0	0.0%	0	0	0.0%	0
Low Energy/Sound & Comm	96	96	100.0%	1	0	0.0%	0	0	0.0%	0
Marine/Industrial/Coating and Lining Specialist Painter	566	0	0.0%	1	0	0.0%	0	0	0.0%	0
Painter and Decorator	107	53	49.3%	1	0	0.0%	0	0	0.0%	0
Pipefitters	559	559	100.0%	1	0	0.0%	0	0	0.0%	0
Plumber	916	71	7.7%	4	0	0.0%	0	71	100.0%	1
Pointer/Cleaner/Caulker	31	0	0.0%	1	0	0.0%	0	0	0.0%	0
Sheet Metal Worker	2,100	1,875	89.3%	13	57	3.0%	2	856	45.7%	3
Sprinkler Fitter	478	144	30.2%	5	0	0.0%	0	0	0.0%	0
Tile/Terrazzo/Marble Finisher	152	52	34.2%	2	0	0.0%	0	0	0.0%	0
Tile setter	128	0	0.0%	1	0	0.0%	0	0	0.0%	0
Total	31,459	9,772	31.1%	150	611	6.3%	7	3,018	30.9%	19

* Indicates percentage of total first year apprentice hours.

Minority and Women Apprentices

The project includes voluntary goals of 15 percent of all labor hours to be performed by apprentices (any level) and 21 and 12 percent goals for minority and women apprentices, respectively.

Table 7 shows the percentage of labor hours performed by apprentices working on the project, the total number of project labor hours worked, and the cumulative apprenticeship rate for the project. As shown at the top of Table 7, the cumulative apprenticeship rate is 18.2 percent, exceeding the 15 percent project goal. Minority apprenticeship hours comprise 33 percent of that total. This rate for minority apprentices significantly exceeds the 21 percent project goal. Minority apprentice labor hours are reported on the project in the following trades: carpenter, cement mason, construction equipment operator, ironworker, and laborer.

Women apprenticeship hours total seven percent. This rate for women apprentices is below the 12 percent voluntary project goal, but above both national apprenticeship rates for women apprentices (those average two to three percent) and the overall percentage of women in the local construction workforce (six percent). With woman representing six percent of the local construction workforce and the high level of construction in the region seeking to utilize apprentices, it was difficult to reach the 12 percent voluntary goal for this project. Women apprentice labor hours are reported on the project in the following trades: carpenter, cement mason, inside wireman, ironworker, laborer, energy/sound & communication technician, and sheet metal worker.

Table 7 – Total Project Labor Hours Worked and Percentage of Labor Hours Performed by Apprentices (Period ending March 31, 2017)

Apprenticeship Goal:		15.0%							
Current Apprenticeship Rate:		18.2%							
Apprentice Utilization by Trade/Craft									
Trade	Total Labor Hours	Total Journey Hours	Total Apprentice Hours	% of Total Hours	Total # Apprentices	* Apprentice Hours			
						Women	% Women	Minorities	% Minorities
Acoustical Applicator	32.0	32.0		0.0%			-		-
Asbestos Worker	33.0	33.0		0.0%			-		-
Bricklayer	250.0	144.0	106.0	42.4%	5		0.00%		0.0%
Carpenter	29,338.5	23,630.9	5,707.6	19.5%	65	23.0	0.40%	3,863.6	67.7%
Carpenter, Scaffold Erector	88.0	0.0	88.0	100.0%	3		0.00%	88.0	100.0%
Carpet, Linoleum & Soft Tile Layer	34.0	34.0		0.0%					
Cement Mason	4,813.5	3,798.5	1,015.0	21.1%	41	294.0	28.97%	632.0	62.3%
Concrete Boom Pumper	396.0	396.0		0.0%					
Constr Equip Operator	4,347.0	0.0	4,347.0	100.0%	29		0.00%	711.5	16.4%
Construction Electrician	24.0	0.0	24.0	100.0%	1		0.00%		0.0%
Drywall Finisher (Taper)	483.0	443.0	40.0	8.3%	3		0.00%	40.0	100.0%
Drywall Installer/taper	3,291.5	3,291.5		0.0%					
Electric Lineman	8.5	8.5		0.0%					
Electrician	17,470.0	17,470.0		0.0%					
Electrician Tech (City of Seattle)	40.1	40.1		0.0%					
Equipment Operator	21,883.0	21,883.0		0.0%					
Fence Erector	154.8	154.8		0.0%					
Flagger	2,353.5	2,353.5		0.0%					
Glaziers	1,379.3	1,379.3		0.0%					
HVAC Service Tech	117.5	0.0	117.5	100.0%	5		0.00%		0.0%
HVAC (Sheet Metal) Worker	1,562.8	1,562.8		0.0%					
Inside Wire-man	6,246.5	0.0	6,246.5	100.0%	61	748.5	11.98%	766.0	12.3%
Insulation (Heat and Frost) Worker	701.0	701.0		0.0%					
Insulation Worker	200.0	200.0		0.0%					
Ironworker	10,496.5	7,391.0	3,105.5	29.6%	65	554.5	17.86%	1,296.0	41.7%
Laborer	28,034.1	23,050.6	4,983.5	17.8%	61	518.0	10.39%	1,255.0	25.2%
Landscaper	160.0	160.0		0.0%					
Lathing Acoustical Drywall Systems Installer	541.0	0.0	541.0	100.0%	8		0.00%	195.0	36.0%
Limited Energy/Sound & Comm Tech	5.5	0.0	5.5	100.0%	1	5.5	100.00%	5.5	100.0%
Low Energy/Sound & Comm	96.0	0.0	96.0	100.0%	6		0.00%		0.0%
Marine/Industrial/Coa	565.7	0.0	565.7	100.0%	5		0.00%	565.7	100.0

Apprenticeship Goal:		15.0%								
Current Apprenticeship Rate:		18.2%								
Apprentice Utilization by Trade/Craft										
Trade	Total Labor Hours	Total Journey Hours	Total Apprentice Hours	% of Total Hours	Total # Apprentices	* Apprentice Hours				
						Women	% Women	Minorities	% Minorities	
ting and Lining Specialist Painter										%
Millwright	937.1	937.1		0.0%						
Operator	392.0	392.0		0.0%						
Other Trade	1,173.3	1,173.3		0.0%						
Painter	4,235.5	4,235.5		0.0%						
Painter and Decorator	106.5	0.0	106.5	100.0%	2		0.00%			0.0%
Pipefitter	936.0	377.0	559.0	59.7%	8		0.00%			0.0%
Plumber	10,171.9	9,255.5	916.4	9.0%	12		0.00%	70.5		7.7%
Pointer/Cleaner/Caulker	30.5	0.0	30.5	100.0%	2		0.00%	30.5		100.0%
Roofer	6,439.9	6,439.9		0.0%						
Sheet Metal Worker	2,099.8	0.0	2,099.8	100.0%	32	56.5	2.69%	856.0		40.8%
Sprinkler Fitter	1,016.5	539.0	477.5	47.0%	9		0.00%			0.0%
Surveyor	393.0	393.0		0.0%						
Teamster	83.8	83.8		0.0%						
Teamster/Truck driver	7,943.7	7,943.7		0.0%						
Telecommunications Technician	266.3	266.3		0.0%						
Tile/Terrazzo/Marble Finisher	159.0	7.0	152.0	95.6%	5		0.00%			0.0%
Tile layer	85.0	85.0		0.0%						
Tile setter	924.0	796.0	128.0	13.9%	2		0.00%			0.0%
Traffic control striper	99.9	99.9		0.0%						
Truck Driver	82.3	82.3		0.0%						
Total	172,722	141,264	31,458.5	18.2%	431	2,200	6.99%	10,375		33.0%

Note:

* Apprentice hours percentage for women and minority participation is percent of total apprentice hours.

Efforts to Achieve Goals for Minority and Women Apprentices

Good-faith efforts to achieve apprenticeship goals include:

- The prime contractor has regular conversations with union hiring halls when unable to staff the project with apprentices from the contractor's existing workforce.
- The contractor has encouraged subcontractors to fulfill apprenticeship goals.
- The contractor regularly participates in construction industry job fairs held for high school and community college students in the region.

Recommendations for Achieving Participation Goals

Recommendations Related to M/WBE Participation Goals:

Request prime contractors to take the following proactive steps to achieve project workforce diversity goals:

- Work closely with King County's BDCC team and the state's OMWBE to identify small businesses and minority-owned and woman-owned businesses for outreach actions and to provide information about upcoming contracting opportunities. Make use of the services and assistance of the U.S. Office of Small Business Administration and the Minority Business Development Agency of the U.S. Department of Commerce.
- Provide notice to small businesses and M/WBE businesses that have expressed interest in the opportunities for work.
- The state OMWBE office can assist contractors in outreach by providing a list of small businesses and certified minority-owned and woman-owned businesses meeting the certification criteria and specializing in the categories of work to be subcontracted. At the prime contractor's request, the OMWBE will post subcontracting opportunities identified by the contractor and the project that include goals for certified M/WBE and SCS businesses on its website.
- Ensure that SCS and M/WBE businesses are made aware of contracting opportunities to the fullest extent possible through outreach and recruitment activities, including placing these firms on solicitation lists and soliciting them whenever they are potential sources. Solicit additional small businesses and minority-owned and women-owned businesses by advertising in local, regional or statewide newspapers, trade association publications, minority-owned and women-owned media outlets, internet or other website listings, and/or by notifying women and minority business organizations and chambers of commerce of procurement opportunities.
- Include a statement in advertisements encouraging minority and women-owned firms to submit bids.
- Solicit potential subcontractors directly at meetings, conferences, by telephone, and in writing (letters, facsimile, email).
- Include information on how potential subcontractors can access project information such as plans, specifications, timing, goals for SCS and M/WBE business participation, and other requirements sufficient to give firms an equal opportunity to compete for work.
- Initiate follow-up contact with SCS and M/WBE businesses to determine whether a bid will be submitted or if additional information is required.
- Where requirements permit, arrange time frames for contracts and establish delivery schedules in a way that encourages and facilitates participation by SCS and M/WBE

businesses. This includes, whenever possible, posting solicitations for bids or proposals for a minimum of 50 percent of the County's bid period before the bid or proposal closing date.

- Require contractors to reduce the size of subcontracting packages into increments that are favorable to smaller businesses, increasing the number of opportunities for SCS and M/WBE business participation. Methods for reducing contract size could include, but are not limited to: reviewing the project for opportunities to stage work; dividing multiple-site work; dividing work by task, and soliciting multiple bid items.

Recommendations Related to Participation Goals for Contractor's Workforce:

The County recognizes the need to continue support of apprenticeship programs designed to develop adequate numbers of competent workers in the construction industry. Such programs enable workers to enter the labor pool fully qualified to earn a family wage on construction jobs. Implementation of the recommendations for increasing the participation of minority-owned and women apprentices would lead to increased availability of those populations in the workforce.

Recommendations Related to Participation Goals for Minority and Women Apprentices:

King County supports the development of a skilled construction workforce through appropriate apprenticeship and training goals and opportunities, particularly for minorities, women, and others facing significant employment barriers. Recommendations for use of apprentices in future transfer station CIP projects include:

- Make apprenticeship hiring goals a priority on all county CIP projects.
- Adopt priority hire policies for publicly funded construction projects.
- Work with construction trade unions to commit specific percentages of construction apprentice slots to targeted demographic groups and to establish voluntary hiring goals for women and minorities.
- Develop a mentor program and provide training to individuals in the construction industry interested in becoming mentors.
- Participate in outreach events such the *Regional Contracting Forum*, *WSDOT Olympic Region Contracting Workshop*, *Women in Trades Career Fair*, and *Hire-A-Vet Job Fair*.

While too large a task for a single capital project, it would be valuable for King County to perform a comprehensive examination of the challenges encountered by women apprentices to identify barriers and best practices to overcome them.

Conclusion and Next Steps

This is the final report on workforce diversity on the Factoria Recycling and Transfer Station construction project. Table 8 below summarizes the project's overall performance on the workforce diversity goals, both at the time of reporting and as expected at project completion based on contracted work.

Table 8 – Workforce diversity goals and performance

Diversity Groups	Goal	Actual-to-Date (Paid hours at 90% Completion)	Final Contracted Amounts
Small Contractors and Suppliers	25%	25.3%	29%
Minority-owned Businesses	10%	7.1%	8%
Women-owned Businesses	6%	4.9%	1% ¹
First-year Apprentice Hours	50%	36.4%	36.4%
Minority Apprentice Hours	21%	33%	33%
Women Apprentice Hours	12%	7%	7%

¹ The actual amount spent has exceeded the contracted amount. See "Women-owned Contractors," page 10 for details.

The goal for minority apprenticeship hours was exceeded. Goals for minority-owned businesses, women-owned businesses and women apprentice hours were not met; minority-owned businesses fell two percent short of the 10 percent goal, women-owned businesses fell one percent short of the six percent goal, and women apprentice hours fell five percent short of the 12 percent goal. However the project made significant improvements in each of these categories between the interim and final reports, even exceeding the general proportion of women in the construction industry in some categories.

Unlike the formal goals set for M/WBE, goals for Workforce Participation by minorities and women were voluntary for this project. Based on workforce availability and regional demographic representation levels, reasonable participation levels on construction projects for minorities is estimated at 25 percent for minorities and at six percent for women. This project has achieved those levels.

In the future, working proactively with prime contractors and unions, participating in outreach activities as described above, and supporting apprenticeship programs will continue to improve the diversity of the workforce on County construction projects.