

Received 8/28/19 Bellingham - GWP

Department of Labor & Industries  
Apprenticeship Section  
PO Box 44530  
Olympia WA 98504-4530



## REQUEST FOR APPROVAL OF PROPOSED STANDARDS



TO: Washington State Apprenticeship & Training Council

*Teri Gardner 8-30-19*

FROM Matrix Service Inc. Industrial Pipefitter

NAME OF PROGRAM STANDARDS

**Check appropriate box:**

☒ Committee

☐ Plant

☐ OJT

OCCUPATION(S):	HOURS:	SOC #:
Industrial Pipefitter	10000	47-2152.01

**Authorized Signatures**

Chair

Secretary

Date

8/26/19

Approved by:

Washington State Apprenticeship & Training Council

Secretary of Council

Date

Received 8/30/19 Bellingham - JWP

Teri Gardner 8-30-19



**APPRENTICESHIP PROGRAM STANDARDS**  
**adopted by**

**MATRIX SERVICE INC. – INDUSTRIAL PIPEFITTER**

(sponsor name)

Occupational Objective(s):

SOC#

Term [WAC 296-05-015]

**INDUSTRIAL PIPEFITTER**

**47-2152.01**

**10,000 HOURS**



**APPROVED BY**  
**Washington State Apprenticeship and Training Council**  
**REGISTERED WITH**  
**Apprenticeship Section of Fraud Prevention and Labor Standards**  
Washington State Department Labor and Industries  
Post Office Box 44530  
Olympia, Washington 98504-4530

**APPROVAL:**

\_\_\_\_\_  
Provisional Registration

\_\_\_\_\_  
Standards Last Amended

\_\_\_\_\_  
Permanent Registration

By: \_\_\_\_\_  
Chair of Council

By: \_\_\_\_\_  
Secretary of Council

# MATRIX SERVICE INC. – INDUSTRIAL PIPEFITTER

## INTRODUCTION

This document is an apprenticeship program standard. Apprenticeship program standards govern how an apprenticeship works and have specific requirements. This document will explain the requirements.

The director of the Department of Labor and Industries (L&I) appoints the Washington State Apprenticeship and Training Council (WSATC) to regulate apprenticeship program standards. The director appoints and deputizes an assistant director to be known as the supervisor of apprenticeship who oversees administrative functions through the apprenticeship section at the department.

The WSATC is the sole regulatory body for apprenticeship standards in Washington. It approves, administers, and enforces apprenticeship standards, and recognizes apprentices when either registered with L&I's apprenticeship section, or under the terms and conditions of a reciprocal agreement. WSATC also must approve any changes to apprenticeship program standards.

Apprenticeship programs have sponsors. A sponsor operates an apprenticeship program and declares their purpose and policy herein to establish an organized system of registered apprenticeship education and training. The sponsor recognizes WSATC authority to regulate and will submit a revision request to the WSATC when making changes to an apprenticeship program standard.

Apprenticeships are governed by federal law (29 U.S.C 50), federal regulations (29 CFR Part 29 & 30), state law (49.04 RCW) and administrative rules (WAC 296-05). These standards conform to all of the above and are read together with federal and state laws and rules

Standards are changed with WSATC approval. Changes are binding on apprentices, sponsors, training agents, and anyone else working under an agreement governed by the standards. Sponsors may have to maintain additional information as supplemental to these standards. When a standard is changed, sponsors are required to notify apprentices and training agents. If changes in federal or state law make any part of these standards illegal, the remaining parts are still valid and remain in force. Only the part made illegal by changes in law is invalid. L&I and the WSATC may cooperate to make corrections to the standards if necessary to administer the standards.

Sections of these standards identified as bold “**insert text**” fields are specific to the individual program standards and may be modified by a sponsor submitting a revised standard for approval by the WSATC. All other sections of these standards are boilerplate and may only be modified by the WSATC. See WAC 296-05-003 for the definitions necessary for use with these standards.

Sponsor Introductory Statement (Required):

**Recognizing the continuous advancements in industrial pipefitting technologies and the challenge to increase customer satisfaction, this program establishes the necessary training**

## MATRIX SERVICE INC. – INDUSTRIAL PIPEFITTER

that leads the successful apprentice to the status of State Certified Journey Level worker in the specified occupation.

### **I. GEOGRAPHIC AREA COVERED:**

The sponsor must train inside the area covered by these standards. If the sponsor wants to train outside the area covered by these standards, the sponsor must enter a portability agreement with a sponsor outside the area, and provide evidence of such an agreement for compliance purposes. Portability agreements permit training agents to use apprentices outside the area covered by the standards. Portability agreements are governed by WAC 296-05-009.

**The area covered by these standards shall be petroleum refining facilities located in Skagit and Whatcom counties.**

### **II. MINIMUM QUALIFICATIONS:**

Minimum qualifications must be clearly stated and applied in a nondiscriminatory manner [WAC 296-05-015(17)].

- Age:           **Applicants shall be at least 18 years of age.**
- Education:   **A high school diploma, General Educational Development (GED) equivalency or other high school equivalency credential is required.**
- Physical:     **Applicants must be physically capable of performing the work of this trade with or without reasonable accommodations, and without posing a direct threat to the health and safety of the individual or others.**
- Testing:      **Applicants must complete the Accuplacer Test (at the applicants expense). The minimum qualifying score is as follows: Arithmetic 67**
- Other:        **Applicants must be a current employee of Matrix Service Inc.**

### **III. CONDUCT OF PROGRAM UNDER WASHINGTON EQUAL EMPLOYMENT OPPORTUNITY PLAN:**

Sponsors with five (5) or more apprentices must adopt an Equal Employment Opportunity (EEO) Plan and Selection Procedure (chapter 296-05 WAC and 29 CFR Part 30).

The recruitment, selection, employment and training of apprentices during their apprenticeship shall be without discrimination because of race, sex (including pregnancy and gender identity), sexual orientation, color, religion, national origin, age, genetic information,



## **MATRIX SERVICE INC. – INDUSTRIAL PIPEFITTER**

disability or as otherwise specified by law. The sponsor shall take positive action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required by the rules of the Washington State Apprenticeship and Training Council and Title 29, Part 30 of the Code of Federal Regulations.

### **A. Selection Procedures:**

- 1. The company shall do a companywide posting, announcing openings as they occur in the apprentice occupation.**
- 2. Applicants must provide an official transcript(s) for high school, any post-high school education, and Accuplacer Test score. Applicant must submit the GED certificate or other high school equivalency credential if applicable.**
- 3. Applicants must submit a DD-214 to verify military training and/or experience if they are a veteran and wish to receive consideration for such training/experience.**
- 4. The company shall select the apprentices from those employees in the company who answer the posting.**
- 5. Selection shall be based on past work history, a demonstrated learning ability, prior schooling or experience, and Committee interview panel.**
- 6. The Committee will notify applicants of the selection.**
- 7. Exceptions may be made by the Apprenticeship Committee to the above qualifications if admission as an apprentice will benefit the applicant and the industry.**
- 8. The amount of credit given for previous work experience shall be determined by the Apprenticeship Committee after a careful review of the merits of each case.**

### **B. Equal Employment Opportunity Plan:**

**The employment policy of Matrix Service Inc. is to provide equal opportunity to all persons. Our company, therefore, has made a commitment to equal employment opportunity through a positive and continuing Affirmative Action Program.**

**Particular attention will be given to female and minority representation, both from within and outside the Company.**

- 1. Communicate and distribute information about the nature of the apprenticeship program, admission requirements, current apprenticeship opportunities, the source of apprenticeship applications, and the equal opportunity policies of the program sponsor within Matrix Service Inc.**

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2. **Use journey-level workers, including minority and female, to assist in the implementation of the sponsor's equal employment opportunity plan.**
3. **Grant credit for previous trade experience or trade-related courses for all applicants equally.**
4. **Participate in events at the nearby community colleges, high schools, and technical schools. Focus will be on the recruitment and placement of minorities and women (minority and non-minority) into the Matrix Service Inc. Industrial Pipefitter Apprenticeship program.**

### C. Discrimination Complaints:

Any apprentice or applicant for apprenticeship who believes they have been discriminated against may file a complaint with the supervisor of apprenticeship (WAC 296-05-443).

## IV. TERM OF APPRENTICESHIP:

The term of apprenticeship for an individual apprentice may be measured through the completion of the industry standard for on-the-job learning (at least two thousand hours) (time-based approach), the attainment of competency (competency-based approach), or a blend of the time-based and competency-based approaches (hybrid approach) [WAC 296-05-015].

**The term of apprenticeship shall be ten thousand (10,000) hours of reasonably continuous on the job training including the apprenticeship initial probationary period.**

## V. INITIAL PROBATIONARY PERIOD:

An initial probationary period applies to all apprentices, unless the apprentice has transferred from another program. During an initial probationary period, an apprentice can be discharged without appeal rights. An initial probationary period is stated in hours or competency steps of employment. The initial probationary period is not reduced by advanced credit or standing. During an initial probationary period, apprentices receive full credit for hours and competency steps toward completion of their apprenticeship. Transferred apprentices are not subject to additional initial probationary periods [WAC 296-05-003].

The initial probationary period is [WAC 296-05-015(22)]:

- A. the period following the apprentice's registration into the program. An initial probationary period must not be longer than twenty percent of the term of the entire

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apprenticeship, or longer than a year from the date the apprenticeship is registered. The WSATC can grant exemptions for longer initial probationary periods if required by law.

- B. the period in which the WSATC or the supervisor of apprenticeship may terminate an apprenticeship agreement at the written request by any affected party. The sponsor or the apprentice may terminate the agreement without a hearing or stated cause. An appeal process is not available to apprentices in their initial probationary period.
- C. **The initial probationary period shall be the first two thousand (2,000) hours of the apprenticeship employment.**

### **VI. RATIO OF APPRENTICES TO JOURNEY LEVEL WORKERS**

Supervision is the necessary education, assistance, and control provided by a journey-level employee on the same job site at least seventy-five percent of each working day, unless otherwise approved by the WSATC. Sponsors ensure apprentices are supervised by competent, qualified journey-level employees. Journey level-employees are responsible for the work apprentices perform, in order to promote the safety, health, and education of the apprentice.

- A. The journey-level employee must be of the same apprenticeable occupation as the apprentice they are supervising unless otherwise allowed by the Revised Code of Washington (RCW) or the Washington Administrative Code (WAC) and approved by the WSATC.
- B. The numeric ratio of apprentices to journey-level employees may not exceed one apprentice per journey-level worker [WAC 296-05-015(5)].
- C. Apprentices will work the same hours as journey-level workers, except when such hours may interfere with related/supplemental instruction.
- D. Any variance to the rules and/or policies stated in this section must be approved by the WSATC.
- E. The ratio must be described in a specific and clear manner, as to the application in terms of job site, work group, department or plant:

**The ratio of apprentices to journey-level workers shall be one (1) apprentice to one (1) journey-level worker on each jobsite.**

### **VII. APPRENTICE WAGES AND WAGE PROGRESSION:**

- A. Apprentices must be paid at least Washington's minimum wage, unless a local ordinance or a collective bargaining agreement require a higher wage. Apprentices must be paid according to a progressively increasing wage scale. The wage scale for apprentices is



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based on the specified journey-level wage for their occupation. Wage increases are based on hours worked or competencies attained. The sponsor determines wage increases. Sponsors must submit the journey-level wage at least annually or whenever changed to the department as an addendum to these standards. Journey-level wage reports may be submitted on a form provided by the department. Apprentices and others should contact the sponsor or the Department for the most recent Journey-level wage rate.

- B. Sponsors can grant advanced standing, and grant a wage increase, when apprentices demonstrate abilities and mastery of their occupation. When advanced standing is granted, the sponsor notifies the employer/training agent of the wage increase the apprenticeship program standard requires.

### C. Wage Progression Schedules

#### **Industrial Pipefitter**

Step	Hour Range or competency step	Percentage of journey-level wage rate*
1	0000 – 2000 hours	40%
2	2001 – 3000 hours	45%
3	3001 – 4000 hours	50%
4	4001 – 5000 hours	55%
5	5001 – 6000 hours	60%
6	6001 – 7000 hours	70%
7	7001 – 8000 hours	80%
8	8001 – 9000 hours	90%
9	9001 – 10000 hours	95%

## VIII. **WORK PROCESSES:**

The apprentice shall receive on the job instruction and work experience as is necessary to become a qualified journey-level worker versed in the theory and practice of the occupation covered by these standards. The following is a condensed schedule of work experience, which every apprentice shall follow as closely as conditions will permit. The following work process descriptions pertain to the occupation being defined.

### A. **Industrial Pipefitter**

#### **Approximate Hours/Competency Level**

1. Blinding and de-blinding piping systems .....1100
2. Fabricating, installing pipe spools, valves, flanges, and similar pipe and related equipment based on isometric drawings .....2000



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3. Flame cut pipe to length and bevel, clean and prepare for fit-up and installation .....	1800
4. Layout, measure, rig, transport, fit and install various piping, pipes and associated equipment .....	1800
5. Hydrostatic/pneumatic testing .....	1100
6. Rigging .....	800
7. Housekeeping – tools, materials, equipment .....	600
8. Safety – Equipment maintenance, PPE, Safety processes and procedures .....	800

**Total Hours/# of Competency Levels: 10,000**

The above schedule of practical work experience is designed as a guide. The Apprentices shall be instructed and trained in all operations and methods customarily used in their trade. Retention of the apprentice on a particular operation beyond the established time should not occur unless there is a definite need for further training in the process and the Apprenticeship Committee grants approval.

### **IX. RELATED/SUPPLEMENTAL INSTRUCTION:**

The apprentice must attend related/supplemental instruction (RSI). Time spent in RSI shall not be considered as hours of work and the apprentice is not required to be paid.

RSI must be provided in safe and healthy conditions as required by the Washington Industrial Safety and Health Act and applicable federal and state regulations.

Hours spent in RSI are reported to L&I each quarter. Reports must show which hours are unpaid and supervised by a competent instructor versus all other hours (paid and/or unsupervised) for industrial insurance purposes.

For purposes of coverage under the Industrial Insurance Act, the WSATC is an employer and the apprentice is an employee when an unpaid, supervised apprentice is injured while under the direction of a competent instructor and participating in RSI activities.

If apprentices do not attend required RSI, they may be subject to disciplinary action by the sponsor.

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A. The methods of related/supplemental training must be indicated below (check those that apply):

☐ Supervised field trips

☒ Sponsor approved training seminars (specify) **Venders, Equipment Manufacturers, Material Manufacturers, Safety Professionals**

☒ Sponsor approved online or distance learning courses (specify) **NCCER Connect**

☐ State Community/Technical college

☐ Private Technical/Vocational college

☒ Sponsor Provided (lab/classroom) **Matrix Service Inc. Facilities**

☐ Other (specify):

B. **(230)** Minimum RSI hours per year defined per the following [see WAC 296-05-015(6)]:

☐ Twelve-month period from date of registration.\*

☒ Defined twelve-month school year: **(July)** through **(June)**.

☐ Two-thousand hours of on the job training.

*\*If no selection is indicated above, the WSATC will define RSI hours per twelve-month period from date of registration.*

C. Additional Information:

1. **Apprentices will be responsible for completing the prescribed curriculum within the designated period. All courses need to be completed with a 75% or better.**
2. **At the end of each quarter, any Apprentices who fail to complete the required courses with passing scores must arrange within one (1) week of the end of the quarter to meet with the Training Director.**
3. **The Apprentice and the Training Director will work together to establish a plan for making up incomplete courses.**

### **X. ADMINISTRATIVE/DISCIPLINARY PROCEDURES:**

A. Administrative Procedures:

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The sponsor may include in this section a summary and explanation of administrative actions performed at the request or on the behalf of the apprentice. Such actions may include but are not limited to:

1. Voluntary Suspension: A temporary interruption in progress of an individual's apprenticeship agreement at the request of the apprentice and granted by the sponsor. The program sponsor shall review apprentices in suspended status at least once each year to determine if the suspension is still appropriate.
2. Advanced Standing or Credit: The sponsor may provide for advanced standing or credit for demonstrated competency, acquired experience, training or education in or related to the occupation. All sponsors need to ensure a fair and equitable process is applied to all apprentices seeking advanced standing or credit per WAC 296-05-015(11).
3. Sponsor Procedures:
  - A. **A daily record of hours worked in each category of on-the-job training will be maintained by each Apprentice. Apprentices will review their properly completed and signed work progress reports weekly with their Journey Level Trainer. Apprentices will submit reports monthly to the Training Director. The report will be submitted on or before the 10th of the following month.**
  - B. **The Apprentice's Journey Level Trainer will sign off the Apprentice's record of hours worked in each category every week.**
  - C. **The Apprentice's will apply oneself both on the job and in related training programs and continually strive to become a skilled worker.**
  - D. **The classroom policies and procedures shall be adhered to at all times by the Apprentice. Apprentices will receive a copy of these policies/procedures on an annual basis.**
  - E. **The Apprentice must read, understand, and abide by the provisions of these standards and Matrix Service Inc. Policies and Procedures.**
  - F. **Apprentices must be in the classroom with the required materials and ready for class by the scheduled time of class.**
  - G. **The responsibility rests solely with the Apprentice to complete all lessons and topics missed due to absenteeism.**
  - H. **Any Apprentice who fails to return to class following a break or who decides to leave early of their own volition, shall be given no credit for that class and shall be marked as absent for the entire class.**



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- I. **Any test missed due to absence of the Apprentice shall be made up at the convenience of the Training Director.**
- J. **Overtime hours worked shall be recorded as actual hours worked.**

### B. Disciplinary Procedures

- 1. The obligations of the sponsor when taking disciplinary action are as follows:
  - a. The sponsor shall be responsible for enacting reasonable policies and procedures and applying them consistently. The sponsor will inform all apprentices of their rights and responsibilities per these standards.
  - b. The sponsor shall notify the apprentice of intent to take disciplinary action and reasons therefore 20 calendar days prior to taking such action. The reason(s) supporting the sponsor's proposed action(s) must be sent in writing to the apprentice.
  - c. The sponsor must clearly identify the potential outcomes of disciplinary action, which may include but are not limited to discipline, suspension or cancellation of the apprenticeship agreement.
  - d. The decision/action of the sponsor will become effective immediately.
- 2. The sponsor may include in this section requirements and expectations of the apprentices and an explanation of disciplinary actions imposed for noncompliance. The sponsor has the following disciplinary procedures to adopt:
  - a. Disciplinary Probation: A time assessed when the apprentice's progress is not satisfactory. During this time the sponsor may withhold periodic wage advancements, suspend or cancel the apprenticeship agreement, or take further disciplinary action. A disciplinary probation may only be assessed after the initial probation is complete.
  - b. Disciplinary Suspension: A temporary interruption in the progress of an individual's apprenticeship agreement. Conditions will include not being allowed to participate in On-the-Job Training (OJT), go to Related Supplemental Instruction (RSI) classes or take part in any activity related to the Apprenticeship Program until such time as the sponsor takes further action. The program sponsor shall review apprentices in such status at least once each year.
  - c. Cancellation: Refers to the termination of an apprenticeship agreement at the request of the apprentice, supervisor, or sponsor. [WAC 296-05-003].
- 3. Sponsor Disciplinary Procedures:



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- a) Monthly work records not turned in by the 10<sup>th</sup> day of the following month may result in the next scheduled uprate being held for thirty (30) days for each offense. Three (3) consecutive offenses may constitute action by the Matrix Service Inc. Industrial Pipefitter Apprenticeship Committee. Disciplinary action may include, Disciplinary Probation, Suspension, or Cancellation of the Apprenticeship Agreement.**
- b) The Apprentice must comply with Matrix Service Inc. attendance policies. Reaching the disciplinary level of attendance occurrences may result in delayed upgrade and/or disciplinary action up to and including cancellation of the Apprenticeship Agreement.**
- c) Apprentices will comply with all Matrix Service Inc. Policies and Procedures. Termination of employment with the Company for any reason will result in the cancellation of the Apprenticeship Agreement.**
- d) Any Apprentice being disciplined will be subject to the disciplinary procedures as set forth in the sections C & D. below.**
- e) The Apprentice may be required to appear before the Apprenticeship Committee and provide an explanation as to why they did not complete all courses for that quarter with passing scores. Disciplinary action may include, disciplinary probation, suspension, or cancellation of the Apprenticeship Agreement.**

### **C. Apprentice Complaint Procedures:**

- 1. The apprentice must complete his/her initial probationary period in order to be eligible to file a complaint (WAC 296-05-105).
- 2. Complaints involving matters covered by a collective bargaining agreement are not subject to the complaint procedures in this section.
- 3. Complaints regarding non-disciplinary matters must be filed with the program sponsor within 30 calendar days from the date of the last occurrence. Complaints must be in writing.
- 4. If the apprentice disagrees with the resolution of the complaint or wishes to contest the outcome of a disciplinary action by the program sponsor, the apprentice must file a written request for reconsideration with the program sponsor within 30 calendar days from the date the apprentice received written notice of action by the program sponsor.

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5. The program sponsor must reply, in writing, to the request for reconsideration within 30 calendar days from the date the program sponsor receives the request. The program sponsor must send a copy of the written reply to the apprentice within the 30 calendar days.
6. If the apprentice disagrees with the program sponsor's decision, the apprentice may file an appeal with the Apprenticeship Program, (WAC 296-05-105). If the apprentice does not timely file an appeal, the decision of the program sponsor is final after 30 calendar days from the date the program sponsor mails the decision to the apprentice. See section "D" below.

### **D. Apprentice Complaint Review/Appeals Procedures:**

1. If the apprentice disagrees with the program sponsor's decision, the apprentice must submit a written appeal to L&I's apprenticeship section within 30 calendar days from the date the decision is mailed by the program sponsor. Appeals must describe the subject matter in detail and include a copy of the program sponsor's decision.
2. The L&I apprenticeship section will complete its investigation within 30 business days from the date the appeal is received and attempt to resolve the matter.
3. If the Apprenticeship section is unable to resolve the matter within 30 business days, the Apprenticeship section issues a written decision resolving the appeal.
4. If the apprentice or sponsor is dissatisfied with L&I's decision, either party may request the WSATC review the decision. Requests for review to the WSATC must be in writing. Requests for review must be filed within 30 calendar days from the date the decision is mailed to the parties.
5. The WSATC will conduct an informal hearing to consider the request for review.
6. The WSATC will issue a written decision resolving the request for review. All parties will receive a copy of the WSATC's written decision.

## **XI. SPONSOR – RESPONSIBILITIES AND GOVERNING STRUCTURE**

The following is an overview of the requirements associated with administering an apprenticeship program. These provisions are to be used with the corresponding RCW and/or WAC. The sponsor is the policymaking and administrative body responsible for the operation and success of this apprenticeship program. The sponsor may assign an administrator or a committee to be responsible for day-to-day operations of the apprenticeship program. Administrators and/or committee members must be knowledgeable in the process of apprenticeship and/or the application of chapter 49.04 RCW and chapter 296-05 WAC and these standards. If applicable, sponsors must develop procedures for:

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### A. Committee Operations (WAC 296-05-009): (Not applicable for Plant Programs)

Apprenticeship committees must be composed of an equal number of management and non-management representatives from a minimum of four to a maximum of twelve members. Committees must convene meetings at least three times per year attended by a quorum of committee members as defined in these approved standards.

### B. Program Operations

The sponsor will record and maintain records pertaining to the administration of the apprenticeship program and make them available to the WSATC or Department upon request. Records required by WAC 296-05-100 will be maintained for five (5) years; all other records will be maintained for three (3) years. Apprenticeship sponsors will submit required forms/reports to the Department of Labor and Industries through one of the two prescribed methods below:

Sponsors shall submit required forms/reports through assigned state apprenticeship consultant.

Or;

Sponsors shall submit required forms/reports through the Apprentice Registration and Tracking System (ARTS), accessed through Secure Access Washington (SAW).

Paper forms as well as ARTS external access forms are available from the sponsor's assigned apprenticeship consultant or online at:

<http://www.lni.wa.gov/TradesLicensing/Apprenticeship/FormPub/default.asp>.

1. The following is a listing of forms/reports for the administration of apprenticeship programs and the time-frames in which they must be submitted:
  - a. Apprenticeship Agreements – within first 30 days of employment
  - b. Authorization of Signature forms - as necessary
  - c. Approved Training Agent Agreements– within 30 days of sponsor action
  - d. Minutes of Apprenticeship Committee Meetings – within 30 days of sponsor approval (not required for Plant program)
  - e. Request for Change of Status - Apprenticeship/Training Agreement and Training Agents forms – within 30 days of action by sponsor.
  - f. Journey Level Wage Rate – annually, or whenever changed as an addendum to section VII. Apprentice Wages and Wage Progression.
  - g. Related Supplemental Instruction (RSI) Hours Reports (Quarterly):
    - 1st quarter: January through March, due by April 10
    - 2nd quarter: April through June, due by July 10
    - 3rd quarter: July through September, due by October 10
    - 4th quarter: October through December, due by January 10
  - h. On-the-Job Work Hours Reports (bi-annual)
    - 1st half: January through June, by July 30



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2nd half: July through December, by January 31

2. The program sponsor will adopt, as necessary, local program rules or policies to administer the apprenticeship program in compliance with these standards. Requests for revision to these standards of apprenticeship must be submitted 45 calendar days prior to a quarterly WSATC meeting. The Department of Labor and Industries, Apprenticeship Section's manager may administratively approve requests for revisions in the following areas of the standards:
  - a. Program name
  - b. Sponsor's introductory statement
  - c. Section III: Conduct of Program Under Washington Equal Employment Opportunity Plan
  - d. Section VII: Apprentice Wages and Wage Progression
  - e. Section IX: Related/Supplemental Instruction
  - f. Section XI: Sponsor – Responsibilities and Governing Structure
  - g. Section XII: Subcommittees
  - h. Section XIII: Training Director/Coordinator
3. The sponsor will utilize competent instructors as defined in WAC 296-05-003 for RSI. Furthermore, the sponsor will ensure each instructor has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide instruction.

### C. Management of Apprentices:

1. Each apprentice (and, if under 18 years of age, the parent or guardian) will sign an apprenticeship agreement with the sponsor, who will then register the agreement with the Department before the apprentice attends RSI classes, or within the first 30 days of employment as an apprentice. For the purposes of industrial insurance coverage and prevailing wage exemption under RCW 39.12.021, the effective date of registration will be the date the agreement is received by the Department.
2. The sponsor must notify the Department within 30 days of all requests for disposition or modification to apprentice agreements, which may include:
  - a) Certificate of completion
  - b) Additional credit
  - c) Suspension (i.e. military service or other)
  - d) Reinstatement
  - e) Cancellation
  - f) Corrections
  - g) Step Upgrades
  - h) Probation Completion date
  - i) Other (i.e., name changes, address)
  - j) Training Agent Cancellation



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3. The sponsor commits to rotate apprentices in the various processes of the skilled occupation to ensure the apprentice is trained to be a competent journey-level worker.
4. The sponsor shall periodically review and evaluate apprentices before advancement to the apprentice's next wage progression period. The evidence of such advancement will be the record of the apprentice's progress on the job and during related/supplemental instruction.
5. The sponsor has the obligation and responsibility to provide, insofar as possible, reasonably continuous employment for all apprentices in the program. The sponsor may arrange to transfer an apprentice from one training agent to another or to another program when the sponsor is unable to provide reasonably continuous employment, or they are unable to provide apprentices the diversity of experience necessary for training and experience in the various work processes as stated in these standards. The new training agent will assume all the terms and conditions of these standards. If, for any reason, a layoff of an apprentice occurs, the apprenticeship agreement will remain in effect unless canceled by the sponsor.
6. An apprentice who is unable to perform the on-the-job portion of apprenticeship training may, if the apprentice so requests and the sponsor approves, participate in related/supplemental instruction, subject to the apprentice obtaining and providing to the sponsor written requested document/s for such participation. However, time spent will not be applied toward the on-the-job portion of apprenticeship training.
7. The sponsor shall hear and decide all complaints of violations of apprenticeship agreements.
8. Upon successful completion of apprenticeship, as provided in these standards, and passing the examination that the sponsor may require, the sponsor will recommend the WSATC award a Certificate of Completion of Apprenticeship. The sponsor will make an official presentation to the apprentice who has successfully completed his/her term of apprenticeship.

### D. Training Agent Management:

1. The sponsor shall offer training opportunities for apprentices by ensuring reasonable and equal working and training conditions are applied uniformly to all apprentices. The sponsor shall provide training at an equivalent cost to that paid by other employers and apprentices participating in the program. The sponsor shall not require an employer to sign a collective bargaining agreement as a condition of participation.
2. The sponsor must determine whether an employer can adequately furnish proper on the job training to an apprentice in accordance with these standards. The sponsor must also require any employer requesting approved training status to complete an

## MATRIX SERVICE INC. – INDUSTRIAL PIPEFITTER

approved training agent agreement and to comply with all federal and state apprenticeship laws, and these standards.

3. The sponsor will submit training agent agreements to the Department with a copy of the agreement and/or the list of approved training agents within thirty calendar days from the effective date. Additionally, the sponsor must submit rescinded training agent agreements to the Department within thirty calendar days of said action.

### E. Committee governance (if applicable): (see WAC 296-05-009)

1. Apprenticeship committees shall elect a chairperson and a secretary who shall be from opposite interest groups, i.e., chairperson-employers; secretary-employees, or vice versa. If the committee does not indicate its definition of quorum, the interpretation will be “50% plus 1” of the approved committee members. The sponsor must also provide the following information:

- a. Quorum: **SEE ABOVE**
- b. Program type administered by the committee: **Individual Non Joint**
- c. The employer representatives shall be:

**Cary Clemenson – Chair  
3810 Bakerview Spur  
Bellingham, WA. 98226**

**Jennifer Torres  
3810 Bakerview Spur  
Bellingham, WA. 98226**

**Rick Stumph  
3810 Bakerview Spur  
Bellingham, WA. 98226**

- d. The employee representatives shall be:

**Mark Williams – Secretary  
3810 Bakerview Spur  
Bellingham, WA. 98226**

**Matt Gerber  
3810 Bakerview Spur  
Bellingham, WA. 98226**

**Scott Howard  
3810 Bakerview Spur  
Bellingham, WA. 98226**

**Chris Colbert – Alternate  
3810 Bakerview Spur  
Bellingham, WA. 98226**

### F. Plant programs

For plant programs the WSATC or the Department designee will act as the apprentice representative. Plant programs shall designate an administrator(s) knowledgeable in the

## **MATRIX SERVICE INC. – INDUSTRIAL PIPEFITTER**

process of apprenticeship and/or the application of chapter 49.04 RCW and chapter 296-05 WAC and these standards.

The designated administrator(s) for this program is/are as follows:

**NA**

### **XII. SUBCOMMITTEE:**

Subcommittee(s) approved by the Department, represented equally from management and non-management, may also be established under these standards, and are subject to the main committee. All actions of the subcommittee(s) must be reviewed by the main committee. Subcommittees authorized to upgrade apprentices and/or conduct disciplinary actions must be structured according to the same requirements for main committees.

**NONE**

### **XIII. TRAINING DIRECTOR/COORDINATOR:**

The sponsor may employ a person(s) as a full or part-time training coordinator(s)/ training director(s). This person(s) will assume responsibilities and authority for the operation of the program as are delegated by the sponsor.

**Kevin Rhoades  
3810 Bakerview Spur  
Bellingham, WA. 98226**



**Apprenticeship Related/Supplemental Instruction (RSI) Plan Review**

Program Sponsor <b>Matrix Service Inc.</b> Industrial Pipefitter		Teri Gardner 8-30-19	
Skilled Occupational Objective <b>Industrial Pipefitter</b>			
Term/OJT Hours <b>10,000 hours</b>	Total RSI Hours <b>1150 hours</b>		
Training Provider <b>Matrix Service Inc.</b>			

By the signature placed below, the **program sponsor** agrees to provide the prescribed RSI for each registered apprenticeship and assures that:

1. The RSI content and delivery method is and remains reasonably consistent with the latest occupational practices, improvements, and technical advances.
2. The RSI is coordinated with the on-the-job work experience.
3. The RSI is provided in safe and healthful work practices in compliance with WISHA and applicable federal and state regulations.

Kevin G. Rhoades

Printed Name of Program Sponsor



Signature of Program Sponsor

By the signature placed below, the **training provider** assures that:

1. The RSI will be conducted by instructors who meet the qualifications of "competent instructor" as described in WAC 296-05-003.
  - a. Has demonstrated a satisfactory employment performance in his/her occupation for a minimum of three years beyond the customary learning period for that occupation; and
  - b. Meets the State Board for Community and Technical Colleges requirements for a professional technical instructor (see WAC 131-16-080 through -094), or be a subject matter expert, which is an individual, such as a journey worker, who is recognized within the industry as having expertise in a specific occupation; and
  - c. Has training in teaching techniques and adult learning styles, which may occur before or within one year after the apprenticeship instructor has started to provide the related technical instruction.
2. If using alternative forms of instruction, such as correspondence, electronic media, or other self-study, such instruction is clearly defined.

Kevin G. Rhoades

Print Name Training Provider



Signature of Training Provider

Director of Apprenticeship

Title of Training Provider

Matrix Service Inc.

Organization of Training Provider

If there are additional training providers, please provide information and signatures on the next page.

**Additional Resources:** Apprenticeship Related Supplemental Instruction (RSI) Plan Review Glossary of Term (F100-519-000) and Apprenticeship Related Supplemental Instruction (RSI) Plan Review Criteria (F100-521-000).

**SBCTC Program Administrator** has reviewed RSI plan and recommendations of the Trade Committee.

Click or tap here to enter text

Print Name of SBCTC Program Administrator

Signature of SBCTC Program Administrator

Date

☐ SBCTC recommends approval

☐ SBCTC recommends return to sponsor



## Additional Training Providers (if necessary)

Click or tap here to enter text.

Print Name Training Provider

Click or tap here to enter text.

Title of Training Provider

Click or tap here to enter text.

Print Name Training Provider

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Title of Training Provider

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Organization of Training Provider

Program Sponsor: <b>Matrix Service Inc.</b> Industrial Pipefitter	Skilled Occupational Objective: <b>Industrial Pipefitter</b>
----------------------------------------------------------------------	-----------------------------------------------------------------

**Note:** The description of each element must be in sufficient detail to provide adequate information for review by the SBCTC and Review Committee. To add more elements, click on the plus sign that appears below the "Description of element/course" field.

**Describe minimum hours of study per year in terms of (check one):**

- ☐ 12-month period from date of registration.  
☒ Defined 12-month school year.  
☐ 2,000 hours of on-the-job training.

Element/Course: HSE Basic Plus Training year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>HSE - Matrix Safety Orientation and Continuous Improvement Certification          Includes: EAZI Way, Behavior Based Safety, Confined Spaces, Electrical Safety &amp; Lockout/Tagout, Emergency Response &amp; Fire Safety, Fall Protection, Hand &amp; Power Tools, Hand Safety, Hazard Recognition, HAZCOM/GHS, Hearing Conservation, Job Safety Analysis, Material Handling, Matrix HSE Management System, Policies, Risk Assessment, &amp; Stop Work Authority</i>	

Element/Course: Refinery Safety Training year 1	Planned Hours: 40
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>In this course apprentices will learn the key aspects of refinery safety. Written and performance verifications will be used to measure the apprentice's knowledge. Topics in the course include: Refinery Evacuations, Plant Overview, Radio Use, IMM Work Scope, PPE, Hearing Conservation and Occupational Noise, Hydrogen Sulfide (H2S), Respiratory Protection, PPE Knowledge Exam, Hazard Communication, Asbestos Program, Silica Control Plan, Lead Benzene, Confined Space Entry &amp; Hands On, Inert Atmospheres, Supplied Air, Ladders and Stairways, Scaffolding, SSE, Fall Protection, Dropped Object Prevention, Compressed Gas and Cylinder Storage, Fire Prevention, Fire Watch, Lockout/Tagout, Transportation of Materials and Personnel, Spill Prevention, Environmental Sustainability, Incident Trends and Reporting Standards, Site Approved Variances, Cell Phone Policy, Utility Knife Policy, Shaving Policy, Refinery Security Information. Hands-on activities in the course include donning PPE, fitting respiratory protection, confined space, supplied air, donning and connecting fall protection, filling out incident reports.</i>	

Element/Course: Abnormal Operating Conditions (AOC) Certification year 1	Planned Hours: 6
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>In this course, apprentices will learn how to recognize, properly react to, and properly report AOC's that may occur during piping operations. This will include lessons on programs, procedures, safety equipment, and warning devices for practically every facet of piping operation.</i>	

Element/Course: Pipefitting Trade Math year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Apprentices will develop a working knowledge and practical application of mathematics as it relates to industrial pipefitting. This course explains how to use ratios and proportions, solve basic algebra, area, volume, and circumference problems, and solve for right triangles using the Pythagorean theorem.</i>	



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Element/Course: Pipe Fitting Hand Tools year 1	Planned Hours: 17
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This module covers general hand tool safety as well as procedures for selecting, inspecting, using, and maintaining hand tools used by pipefitters. Coverage includes pipe wrenches, pipe stands, pipe vises, levels, pipe fabrication tools, pipe bending tools, and pipe joining tools.</i>	

Element/Course: Pipe Fitting Power Tools year 1	Planned Hours: 14
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This course covers general power tool safety as well as procedures for selecting, inspecting, using, and maintaining power tools used by pipefitters. Provides guidelines for using electrical and pneumatic tools, including pipe threading machines.</i>	

Element/Course: Oxy Fuel Cutting year 1	Planned Hours: 16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains the safety requirements for oxyfuel cutting. Identifies oxyfuel cutting equipment and provides instructions for setting up, lighting, and using the equipment. Includes straight line cutting, piercing, beveling, washing, and gouging. Apprentices will also have hands-on practice setting up, lighting, and using the equipment. Including straight line cutting, piercing, beveling, washing, and gouging</i>	

Element/Course: Motorized Equipment year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains the safety factors, operator maintenance, and operating procedures associated with motorized equipment used on job sites, including electrical generators, air compressors, aerial lifts, pumps, and forklifts.</i>	

Element/Course: Equipment Training & Certification year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>In this course apprentices will receive classroom and Lab training on All Terrain Forklifts, Man Lifts, Scissor Lifts, Skid Steers, and Generators. Describes common manlift equipment and construction equipment. Apprentices will learn how to use equipment manuals, perform record keeping, and follow safety requirements.</i>	

Element/Course: Piping Systems year 1	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This course introduces chemical, compressed air, fuel oil, steam, and water systems. Explains how to identify piping systems according to color codes.</i>	

Teri Gardner 10-3-19



Element/Course: Drawings and Detail Sheets year 1	Planned Hours: 15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This module introduces the apprentice to plot plans, structural drawings, elevation drawings, as-built drawings, equip drawings, P&amp;IDs, isometric drawings, spool sheets, and data sheets.</i>	

Element/Course: Fasteners and Anchors year 1	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This course covers the hardware and systems used by an industrial pipefitter craftsperson. Describes various types of anchors and supports, their applications, and how to install them safely. Explains how to recognize foot pounds, inch pounds, thread identification, tolerance, and torque. Will include hands – on exercises in installing fasteners correctly and safely.</i>	

Element/Course: Ladders and Scaffolds year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Covers hazards and safety procedures governing the use of stepladders, extension ladders, fixed scaffolds, and rolling scaffolds. Includes general procedures for scaffold assembly and use.</i>	

Element/Course: Introduction to Materials Handling year 1	Planned Hours: 6
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This module describes the hazards associated with handling materials and provides techniques to avoid both injury and property damage. Common material-handling equipment is also introduced.</i>	

Element/Course: Introduction to Const Drawings year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Introduces the basic elements of construction drawings. The common components of drawings are presented, as well as the most common drawing types. The use of drawing scales and how to measure drawings is also covered.</i>	

Element/Course: Welding Basics year 1	Planned Hours: 20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This course describes the different welding and cutting processes and related equipment. Includes filler metals and their applications. Covers joint design and the codes that govern welding practices</i>	

Element/Course: Communication Signal Person (Rigging) year 1	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Describes the communication process between the rigger and the crane operator. Covers electronic communication as well as the standard hand signals in 29 CFR 1926</i>	

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Element/Course: Basic Principles of Cranes (Rigging) year 1	Planned Hours: 16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Offers trainees an introduction to mobile crane equipment with an in-depth discussion of terminology and nomenclature. Explains the basic scientific principles associated with mobile crane operation. This course will cover safety around cranes, crane manuals, load charts, and crane size/load.</i>	

Element/Course: HSE Basic Safety (Recertification) year 2	Planned Hours: 8
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course will include any updates along with the original safety training to include: HSE - Matrix Safety Orientation and Continuous Improvement Certification</i> <i>Includes: EAZI Way, Behavior Based Safety, Confined Spaces, Electrical Safety &amp; Lockout/Tagout, Emergency Response &amp; Fire Safety, Fall Protection, Hand &amp; Power Tools, Hand Safety, Hazard Recognition, HAZCOM/GHS, Hearing Conservation, Job Safety Analysis, Material Handling, Matrix HSE Management System, Policies, Risk Assessment, &amp; Stop Work Authority</i>	

Element/Course: Crane Safety (Rigging) year 2	Planned Hours: 12
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course Introduces apprentices to various safety aspects of mobile crane operation, including equipment inspection, site hazard identification, and required personal protection equipment. Discusses how to work with site plans and specifications</i>	

Element/Course: Identifying/installing valves year 2	Planned Hours: 23
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course identifies and provides installation methods for different types of valves. Also covers valve storage and handling.</i>	

Element/Course: Pipe fitting trade Math year 2	Planned Hours: 15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Apprentices will learn how to use ratios and proportions, solve basic algebra, area, volume, and circumference problems, and solve for right triangles using the Pythagorean theorem.</i>	

Element/Course: Threaded Pipe Fabrication year 2	Planned Hours: 15
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Describes the materials used in threaded piping systems. Explains how to determine pipe lengths between threaded pipe fittings, prepare the pipe and fittings for fit-up, and assemble the piping system.</i>	

*Teri Gardner 10-3-19*



Received 10/2/19 Bellingham - JWP

Received 8/26/19 Bellingham - JWP

Element/Course: Socket Weld Pipe Fabrication year 2	Planned Hours: 25
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course will describe the materials used in socket weld piping systems. Explains how to determine pipe lengths between socket weld fittings, prepare the pipe and fittings for fit-up, and fabricate socket weld fittings.</i>	

Element/Course: Butt Weld Pipe Fabrication year 2	Planned Hours: 37
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>In this course apprentices will learn the materials used in butt weld piping systems. Explains how to determine pipe lengths between butt weld fittings, prepare the pipe and fittings for fit-up, and fabricate butt weld fittings. Also describes how to select and install backing rings, fabricate channel iron welding jigs, and use and care for welding clamps.</i>	

Element/Course: Mobile Construction Cranes year 2	Planned Hours: 16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Identifies and describes common lifting equipment and construction cranes. Describes using crane manuals, performing recordkeeping, and following safety requirements. Describes ANSI signals for cranes. Provides procedures for assembling and disassembling construction cranes.</i>	

Element/Course: Advanced Rigging year 2	Planned Hours: 18
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This module explains how load weight and center of gravity affect lifting and crane stability. Load calculations for multi-crane lifts are presented, along with the application of equalizer beams. The movement of loads up an inclined plane and the line pull required are examined in detail. The module concludes with guidance in the rigging and handling of rebar bundles.</i>	

Element/Course: Load Charts (Rigging) year 2	Planned Hours: 18
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course discusses the importance of load charts and charts that apply to different configurations. Includes on-rubber, on-outrigger, jib, and deduction charts, as well as range diagrams and operational notes, and calculations</i>	

Element/Course: Welding Safety year 2	Planned Hours: 6
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course covers safety equipment, protective clothing, and procedures applicable to the cutting and welding of metals.</i>	

Element/Course: Base Material Preparation year 2	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Describes how to clean and prepare all types of base metals for cutting or welding. Identifies and explains joint design and base metal preparation for all welding tasks.</i>	



Element/Course: Plasma Arc Cutting year 2	Planned Hours: 7
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains plasma arc cutting equipment and safe work area preparation. Identifies correct amperage, gas pressures, and flow rates. Covers plasma-arc cutting methods for piercing, slotting, squaring, and beveling metals. Explains how to store equipment and clean the work area.</i>	

Element/Course: Welding Quality year 2	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course identifies the codes that govern welding, including marine welds. Identifies and explains weld imperfections and causes. Describes non-destructive examination practices, visual inspection criteria, welder qualification tests, and the importance of quality workmanship</i>	

Element/Course: SMAW-Equipment and Setup year 2	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Describes SMAW welding and welding safety. Explains how to connect welding current and setup arc welding equipment. Identifies and explains using tools for cleaning welds.</i>	

Element/Course: Introduction to Piping Components year 2	Planned Hours: 5
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course introduces the fundamental theories and practical application of piping systems with focus on system setup, maintenance, and repair. Topics include compressed air, fuel oil, steam, chemical and water systems. Explains how to identify piping systems according to color codes</i>	

Element/Course: HSE Basic Safety (Recertification) year 3	Planned Hours: 8
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course will include any updates along with the original safety training to include: HSE - Matrix Safety Orientation and Continuous Improvement Certification</i> <i>Includes: EAZI Way, Behavior Based Safety, Confined Spaces, Electrical Safety &amp; Lockout/Tagout, Emergency Response &amp; Fire Safety, Fall Protection, Hand &amp; Power Tools, Hand Safety, Hazard Recognition, HAZCOM/GHS, Hearing Conservation, Job Safety Analysis, Material Handling, Matrix HSE Management System, Policies, Risk Assessment, &amp; Stop Work Authority</i>	

Received 10/2/19 Bellingham - JWP Received 8/26/19 Bellingham - JWP

Element/Course: Refinery Safety Training (Refresher) year 3	Planned Hours: 30
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>In this course apprentices will learn the key aspects of refinery safety. Written and performance verifications will be used to measure the apprentice's knowledge. Topics in the course include: Refinery Evacuations, Plant Overview, Radio Use, IMM Work Scope, PPE, Hearing Conservation and Occupational Noise, Hydrogen Sulfide (H2S), Respiratory Protection, PPE Knowledge Exam, Hazard Communication, Asbestos Program, Silica Control Plan, Lead Benzene, Confined Space Entry &amp; Hands On, Inert Atmospheres, Supplied Air, Ladders and Stairways, Scaffolding, SSE, Fall Protection, Dropped Object Prevention, Compressed Gas and Cylinder Storage, Fire Prevention, Fire Watch, Lockout/Tagout, Transportation of Materials and Personnel, Spill Prevention, Environmental Sustainability, Incident Trends and Reporting Standards, Site Approved Variances, Cell Phone Policy, Utility Knife Policy, Shaving Policy, Refinery Security Information. Hands-on activities in the course include donning PPE, fitting respiratory protection, confined space, supplied air, donning and connecting fall protection, filling out reports.</i>	

Element/Course: Excavations year 3	Planned Hours: 14
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>In this module apprentices will learn the use of shoring materials per OSHA standards and covers shoring systems, installing a hydraulic vertical shore, determining the overall fall of a sewer line, setting the grade and elevation of a trench, and backfilling.</i>	

Element/Course: Underground Pipe Install year 3	Planned Hours: 22
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course explains pipe installation procedures and guidelines, including the procedures for cast iron, ductile iron, concrete, carbon steel, fiberglass and thermoplastic pipe. Includes an introduction to horizontal directional drilling for pipe installation.</i>	

Element/Course: Standards and Specifications year 3	Planned Hours: 12
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains how to read and interpret pipefitting standards, codes, and specifications. Describes how to identify pipe and components according to specifications.</i>	

Element/Course: Introduction to Above Ground Pipe year 3	Planned Hours: 22
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Apprentices will learn various types of pipe, flanges, gaskets, and bolts. Includes step-by-step procedures for installing pipe sleeves and floor penetrations.</i>	

Element/Course: Field Routing and Vessel Trim year 3	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains how to secure the work area and determine field run specifications, load weights for erection equipment, and support needs. Covers how to erect vessel trim.</i>	

Teri Gardner 10-3-19



Received 10/2/19 Bellingham - JWP

Received 8/26/19 Bellingham - JWP

Element/Course: Pipe Hangers and Supports year 3	Planned Hours: 16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>In this module apprentices will learn how to identify, select, and install pipe hangers and supports, including spring can supports. Apprentices will use real life applications in a Lab setting to properly install pipe hangers and pipe support systems.</i>	

Element/Course: Advanced Blue Print year 3	Planned Hours: 30
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains how to derive necessary construction information from P&amp;IDs, general arrangement drawings, ISOs, and spool sheets. Includes nine 11 x 17 blueprints.</i>	

Element/Course: Lift Planning (Rigging) year 3	Planned Hours: 16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This module discusses lift plan implementation, including reference information, calculations, single- and multiple-crane lifting, critical lifts, and engineering considerations.</i>	

Element/Course: Hoisting Personnel & Adv Rigger Certification year 3	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course covers all safety requirements to hoist personnel. Also examines ASME B30.23 and 29 CFR 1926.550(g) requirements while presenting advanced operation techniques for hoisting personnel.</i>	

Element/Course: SMAW-Open Root Pipe Welds year 3	Planned Hours: 40
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains how to set up SMAW equipment for open-root V-groove welds, and explains how to prepare for and make open-root V-groove welds on carbon steel pipe. Provides procedures for making open-root V-groove welds with SMAW equipment on pipe in the 1G-ROTATED, 2G, 5G, and 6G positions.</i>	

Element/Course: HSE Basic Safety (Recertification) year 4	Planned Hours: 8
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>This course will include any updates along with the original safety training to include: HSE - Matrix Safety Orientation and Continuous Improvement Certification</i> <i>Includes: EAZI Way, Behavior Based Safety, Confined Spaces, Electrical Safety &amp; Lockout/Tagout, Emergency Response &amp; Fire Safety, Fall Protection, Hand &amp; Power Tools, Hand Safety, Hazard Recognition, HAZCOM/GHS, Hearing Conservation, Job Safety Analysis, Material Handling, Matrix HSE Management System, Policies, Risk Assessment, &amp; Stop Work Authority</i>	

Teri Gardner 10-3-19



Element/Course:	Abnormal Operating Conditions (Recertification) year 4	Planned Hours:	6
Mode of Instruction (check all that apply)			
<input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study			
Provided by: Matrix Service Inc.			
Description of element/course:			
<i>In this course, apprentices will learn how to recognize, properly react to, and properly report AOC's that may occur during piping operations. This will include lessons on programs, procedures, safety equipment, and warning devices for practically every facet of piping operation.</i>			

Element/Course:	FCAW — Pipe year 4	Planned Hours:	46
Mode of Instruction (check all that apply)			
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study			
Provided by: Matrix Service Inc.			
Description of element/course:			
<i>Explains how to set up FCAW equipment for open-root V-groove welds and explains how to prepare for and make open-root V-groove welds on carbon steel pipe. Provides procedures for making open-root V-groove welds with FCAW equipment on pipe in the 1G-ROTATED, 2G, 5G, and 6G positions.</i>			

Element/Course:	Reading Welding Detail Drawings year 4	Planned Hours:	10
Mode of Instruction (check all that apply)			
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study			
Provided by: Matrix Service Inc.			
Description of element/course:			
<i>This course identifies and explains welding detail drawings. Describes lines, fills, object views, and dimensioning on drawings. Explains how to use notes on drawings and the bill of materials. Explains how to sketch and draw basic welding drawings.</i>			

Element/Course:	Testing Piping Systems year 4	Planned Hours:	20
Mode of Instruction (check all that apply)			
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study			
Provided by: Matrix Service Inc.			
Description of element/course:			
<i>This course explains how to perform pretests, service flow tests, head pressure tests, hydrostatic tests, and steam blow tests.</i>			

Element/Course:	Advanced Pipe Fab year 4	Planned Hours:	46
Mode of Instruction (check all that apply)			
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study			
Provided by: Matrix Service Inc.			
Description of element/course:			
<i>This module will cover the skills needed to layout and fabricate mitered bends, laterals, wyes, and ninety-degree intersections with tables of ordinates or by calculating ordinates with a calculator. These skills are necessary when specialty bends and intersections are required.</i>			

Element/Course:	In Line Specialties year 4	Planned Hours:	10
Mode of Instruction (check all that apply)			
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study			
Provided by: Matrix Service Inc.			
Description of element/course:			
<i>Describes the various devices that appear in pipelines, including bleed rings, ball and expansion joints, steam traps, drip legs, desuperheaters, and measuring devices for temperature, level, flow rate, and pressure.</i>			

Element/Course:	Stress relieving and Aligning year 4	Planned Hours:	10
Mode of Instruction (check all that apply)			
<input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study			
Provided by: Matrix Service Inc.			
Description of element/course:			
<i>This course teaches the nature of inaccuracy, misalignment and pipe strain, and addresses the methods of correcting them. Includes methods of effective communication to reduce these errors.</i>			



Element/Course: Special Piping year 4	Planned Hours: 24
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Introduces copper and plastic pipe and tubing. Addresses brazing, soldering, and the differences between the two methods. Also describes the methods of assembling plastic pipe and tubing, compression and flared fittings, and joining methods for grooved and compression formed fittings.</i>	

Element/Course: Demolition year 4	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>In this course apprentices will learn the demolition procedures that apply to pipe and piping systems in a refinery, to include underground and above ground piping, pipe to vessels, and instrumentation. The apprentices will also learn about and practice using various tools needed for dismantling of pipe and equipment.</i>	

Element/Course: GTAW-Carbon Steel Pipe year 4	Planned Hours: 40
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains how to set up GTAW equipment for open-root V-groove welds and explains how to prepare for and make open-root V-groove welds on carbon steel pipe. Provides procedures for making open-root V-groove welds with GTAW equipment on pipe in the 2G, 5G, and 6G positions.</i>	

Element/Course: HSE Basic Safety (Recertification) year 5	Planned Hours: 8
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input checked="" type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This course will include any updates along with the original safety training to include: HSE - Matrix Safety Orientation and Continuous Improvement Certification          Includes: EAZI Way, Behavior Based Safety, Confined Spaces, Electrical Safety &amp; Lockout/Tagout, Emergency Response &amp; Fire Safety, Fall Protection, Hand &amp; Power Tools, Hand Safety, Hazard Recognition, HAZCOM/GHS, Hearing Conservation, Job Safety Analysis, Material Handling, Matrix HSE Management System, Policies, Risk Assessment, &amp; Stop Work Authority</i>	

Element/Course: Refinery Safety Training (Refresher) year 5	Planned Hours: 30
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>In this course apprentices will learn the key aspects of refinery safety. Written and performance verifications will be used to measure the apprentice's knowledge. Topics in the course include: Refinery Evacuations, Plant Overview, Radio Use, IMM Work Scope, PPE, Hearing Conservation and Occupational Noise, Hydrogen Sulfide (H2S), Respiratory Protection, PPE Knowledge Exam, Hazard Communication, Asbestos Program, Silica Control Plan, Lead Benzene, Confined Space Entry &amp; Hands On, Inert Atmospheres, Supplied Air, Ladders and Stairways, Scaffolding, SSE, Fall Protection, Dropped Object Prevention, Compressed Gas and Cylinder Storage, Fire Prevention, Fire Watch, Lockout/Tagout, Transportation of Materials and Personnel, Spill Prevention, Environmental Sustainability, Incident Trends and Reporting Standards, Site Approved Variances, Cell Phone Policy, Utility Knife Policy, Shaving Policy, Refinery Security Information. Hands-on activities in the course include donning PPE, fitting respiratory protection, confined space, supplied air, donning and connecting fall protection, filling out reports.</i>	



Element/Course: Standards and Specifications year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains how to read and interpret pipefitting standards, codes, and specifications. Describes how to identify pipe and components according to specifications.</i>	

Element/Course: Steam Traps year 5	Planned Hours: 16
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This module teaches apprentices types of traps, their functions and advantages, and the basic methods of troubleshooting steam traps.</i>	

Element/Course: Hot Taps year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Teaches the hot tap technique for attaching fittings to the pipeline. Includes line stopping, freeze stopping, and adding connections to the line.</i>	

Element/Course: Advanced Trade Math year 5	Planned Hours: 20
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This course discusses the use of equivalent and conversion tables. Explains how to use right angle trigonometry to calculate take-outs.</i>	

Element/Course: Standards and Specifications year 5	Planned Hours: 6
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>Explains how to read and interpret pipefitting standards, codes, and specifications. Describes how to identify pipe and components according to specifications.</i>	

Element/Course: Advanced Blueprint Reading year 5	Planned Hours: 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This module explains how to derive necessary construction information from P&amp;IDs, general arrangement drawings, ISOs, and spool sheets. Includes nine 11 x 17 blueprints.</i>	

Element/Course: Advanced Pipe Fabrication year 5	Planned Hours: 50
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study Provided by: Matrix Service Inc.	
Description of element/course: <i>This course covers the skills needed to layout and fabricate mitered bends, laterals, wyes, and ninety-degree intersections with tables of ordinates or by calculating ordinates with a calculator. These skills are necessary when specialty bends and intersections are required.</i>	



Element/Course: In-Line Specialties year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Describes the various devices that appear in pipelines, including bleed rings, ball and expansion joints, steam traps, drip legs, desuperheaters, and measuring devices for temperature, level, flow rate, and pressure.</i>	

Element/Course: Maintaining Valves year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input checked="" type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Describes the various devices that appear in pipelines, including bleed rings, ball and expansion joints, steam traps, drip legs, desuperheaters, and measuring devices for temperature, level, flow rate, and pressure.</i>	

Element/Course: Introduction to Supervisory Roles year 5	Planned Hours: 10
Mode of Instruction (check all that apply) <input checked="" type="checkbox"/> Classroom <input type="checkbox"/> Lab <input type="checkbox"/> Online <input type="checkbox"/> Self-Study	
Provided by: Matrix Service Inc.	
Description of element/course: <i>Provides an introductory explanation of cultural and gender differences in work scenarios. Covers the basic requirements for movement into supervisory roles, and legal and ethical issues of supervisory roles.</i>	

Department of Labor and Industries  
Apprenticeship Section  
PO Box 44530  
Olympia WA 98504-4530



## Apprenticeship Committee Representative Qualification Information Experience & Education History

<b>NAME OF PROGRAM/SPONSOR:</b>	Matrix Service Inc. Industrial Pipefitter	<i>Teri Gardner 8-30-19</i>
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Committee Representative Name:  
Rick Stumph

### WORK EXPERIENCE

POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Site Manager	Matrix Service Inc	1/2019	Present
Project Manager	Matrix Service Inc	6/2017	1/2019
Project Manager	JH Kelly	5/2005	5/2017

### EDUCATION HISTORY

Name and Location of Training and/or School	Month/Year Attended From                      To		Program of Study	Type of Certificate or Degree Awarded, if any
Central Washington University	1998	2004	Construction Management	BS
Mark Morris High School	1994	1998	General	Diploma

### OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD


Sponsors may attach additional pages if necessary.



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Teri Gardner 8-30-19

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## Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Matrix Service Inc. Industrial Pipefitter
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Committee Representative Name:  
Mark Williams

### WORK EXPERIENCE

POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Pipe Welder	Matrix	Jan 2001	current
Welder	IMAC	DEC 1999	June 2000
Welder	TIMEC	Oct 1998	June 1999
Pipe Wleder	TIC	APR 1998	Sept 1998
Pipe Welder	Colt Construction	Sept 1997	Mar 1998
Fitter, Welder	US Navy	Oct 1981	July 1997

### EDUCATION HISTORY

Name and Location of Training and/or School	Month/Year Attended From To		Program of Study	Type of Certificate or Degree Awarded, if any
Parkersburg High School, Pakersburg West Virginia	1979	1981	General	General
US Navy	1981	1997	Fitting, welding	good conduct discharge

### OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD


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Teri Gardner 8-30-19

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## Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF  
PROGRAM/SPONSOR: Matrix Service Inc. Industrial Pipefitter

Committee Representative Name:  
Cary Clemenson

### WORK EXPERIENCE

POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Maintenance Division Manager	Matrix Service	1/19	
BPCHP Matrix Site Manager	Matrix Service	1/16	12/18
BPCHP Refinery Const Manager	BP	1/13	12/15
BPCHP Reformer Process Supt	BP	1/10	12/12
BPCHP Utilities	BP	1/07	12/09
BPCHP Hydrocracker Foreman	BP	12/99	12/06

### EDUCATION HISTORY

Name and Location of Training and/or School	Month/Year Attended From To		Program of Study	Type of Certificate or Degree Awarded, if any
US Navy	8/86	8/87	Operations Specialist	none
Ferndale High School	9/82	6/86	High School	Diploma

### OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD


Sponsors may attach additional pages if necessary.



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## Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Matrix Service Inc. Industrial Pipefitter
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Committee Representative Name:  
Christopher Colbert

WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Senior Craft Pipe Fitter	Matrix (Bellingham Group)	2/2018	current
Senior Craft Pipe Fitter	matrix (houston group)	5/2017	11/2017
Fitter/foreman	Specialty welding and turnaround	8/2014	4/2017
foreman	Turner Construction	2/2016	8/2016
Fitter	World Wide Welding/ Transfield	6/2014	8/2014
Fitter	Performance Contractors	5/2007	3/2014

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
Armwood Highschool	8/1999	5/2003	Standard Scholastic program	graduate diploma

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD

Sponsors may attach additional pages if necessary

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*Teri Gardner 8-30-19*

**Apprenticeship Committee Representative  
Qualification Information  
Experience & Education History**

NAME OF PROGRAM/SPONSOR:	Matrix Service Inc. Industrial Pipefitter
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Committee Representative Name:  
Scott Howard

**WORK EXPERIENCE**

POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Pipe Fitter	Matrix	Oct 2008	Aug 2019
Shop fabrication	Greenberry	Nov 2007	Oct 2008
Pipe Fitter	Matrix	Mar 2005	DEC2007
Pipe Fitter	Gentry	Mar 2000	Apr 2005
Pipe Fitter	Harbert Yeagsin	Oct 1995	Spet 1997
Pipe Fitter	Colt	Oct 1997	Dec 2000

**EDUCATION HISTORY**

Name and Location of Training and/or School	Month/Year Attended From To		Program of Study	Type of Certificate or Degree Awarded, if any
Sperr Jr-Sr	84	86	Basic	

**OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD**


Sponsors may attach additional pages if necessary



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Teri Gardner 8-30-19

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## Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Matrix Service Inc. Industrial Pipefitter
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Committee Representative Name: Matt Gerber
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WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Pipe Welder	Matrix	Feb 2011	Aug 2019
Pipe Welder	Brinderson	Aug 2010	June 2011
Pipe Welder	Matrix	Feb 2008	June 2011
Helper	Timec	Feb 2002	March 2002
Welder Fabricator	Pederson Bros	Sept 2002	March 2008

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended		Program of Study	Type of Certificate or Degree Awarded, if any
	From	To		
Mt. Baker High	Sept 1999	June 2002		Diploma

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD
WABO



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Teri Gardner 8-30-19

## Apprenticeship Committee Representative Qualification Information Experience & Education History

NAME OF PROGRAM/SPONSOR:	Matrix Service Inc. Industrial Pipefitter
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Committee Representative Name: Jennifer Torres
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WORK EXPERIENCE			
POSITION (Most recent first)	EMPLOYER / ORGANIZATION	FROM: (Month & Year)	TO: (Month & Year)
Reginol HR Manager	Matrix Service Inc.	11/2018	Pres.
Craft Recruiting Manager	Matrix Service Inc.	10/2016	11/2018
Craft and Staff Recruiter	Matrix Service Inc.	1/2003	10/2016

EDUCATION HISTORY				
Name and Location of Training and/or School	Month/Year Attended From To		Program of Study	Type of Certificate or Degree Awarded, if any
UCSB	1993	1997	Psychology	BA

OTHER TECHNICAL CERTIFICATIONS or LICENSES HELD
CA Teachers Credential
NCCER

Sponsors may attach additional pages if necessary.



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**Access Authorization for External Access to  
Apprenticeship Registration and Tracking System**  
*Teri Gardner 8-30-19(ARTS)*

The following individual is authorized access to the ARTS database for the Registered Apprenticeship Program(s) as indicated below:

NOTE: If any information (especially the Chairman/Secretary/Authorized Official) below changes, A NEW ACCESS form is REQUIRED to be filled out and submitted as an UPDATE.

Initial Request	X	Update	
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**Individual Information:**

Full Name	Kevin G. Rhoades		
Mailing Address (complete)	3810 Bakerview Spur Bellingham, WA 98226		
Phone	657-274-5056	FAX	360-671-2973
Email	krhoades@matrixservice.com		
Effective Date	8/30/2019		

*Kevin G. Rhoades*

(Signature of Individual)

Program ID(s)	Full Program Name(s)
	Matrix Service Inc. Industrial Pipefitter

**Chairman/Secretary/Authorized Individual Information:**

Full Name	Cary Clemenson		
Mailing Address	3810 Bakerview Spur Bellingham, WA 98226		
Phone	360 595 3084	FAX	360 595 3084
Email	cclemenson@matrixservice.com		
Date	8/30/2019		

*Cary Clemenson*  
(Chairman/Secretary/Authorized Individual Signature Required for Processing)

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Teri Gardner 8-30-19

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## AUTHORIZATION OF SIGNATURE



Effective Date  
08/30/2019

This form will supersede all other "Authorization of Signature" forms on record with the Department of Labor and Industries by the below named program with an effective date or submittal date earlier than the above effective date.


Program Name: Matrix Service Inc. Industrial Pipefitter

Select one of the following		
Name of Individual(s)	All papers pertaining to the business of this Apprenticeship program.	Apprenticeship Agreement Cards only.
Kevin Rhoades	X	
Cary Clemenson	X	
Mark Williams	X	

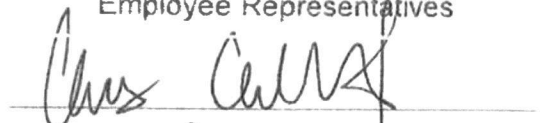


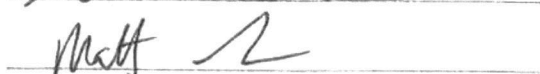
We, the undersigned committee members of the above named apprenticeship program give our authorization for the above individual(s) to sign documents as indicated.

A quorum of the committee must sign below: (WAC 296-05-208(3))

Employer Representatives

  
Jennifer Yu

Employee Representatives

  
Chris Allen  
  
Mark Williams  
  
Scott Hovatt  
  
Matt R





## MATRIX SERVICE

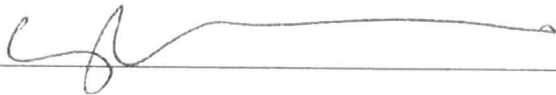
*Received 8/28/19 Bellingham - JWP*  
*Move to a higher standard!*

*Teri Gardner 8-30-19*

### Matrix Service Inc. Pipefitter Apprenticeship Training Committee Selection Process

On 07/30/2019 a meeting was held with the Pipefitter Workforce to notify them that we, Matrix Service Inc. were going to be starting an apprenticeship program for the Industrial Pipefitter as an "apprenticeable occupation". This program is being implemented to comply with the proposed Washington State standards as a "skilled and trained workforce".

Per our standards of apprenticeship, the workforce was asked for volunteers to serve as committee members on our Apprenticeship Training Committee. On this day we had a corium of volunteers and from that they voted the committee members, secretary and Alternate. This process was completed per our standards of apprenticeship.



Cary Clemenson, Committee Chair

08/26/19

Received 8/28/19 Bellingham - JWK  
Teri Gardner 8-30-19

Department of Labor and Industries  
Apprenticeship Section  
PO Box 44530  
Olympia WA 98504-4530



**REGISTERED APPRENTICESHIP  
PROGRAM ADDRESS/MAILING  
INFORMATION UPDATE  
(FOR PUBLIC USE)**

Official Name of Standard:  
Matrix Service Inc. - Industrial Pipefitter

Name/Title of Designated Individual for Receipt of Correspondence:  
Cary Clemenson, Division Manager of Maintenance

Mailing Address:  
3810 Bakerview Spur  
Bellingham, WA.  
98226


Phone number 360-595-3084 FAX #

Toll Free Number (if available)

E-mail Address cclemenson@matrixservice.com

Internet Site Address

Chairman/Secretary/Authorized official signature:  
(Signature required for processing)

  
Signature  
Cary Clemenson  
Printed Name  
8/28/19  
Date

Please Mail Completed Form To:

Department of Labor and Industries  
Specialty Compliance Services Division  
Apprenticeship Section  
PO Box 44530  
Olympia WA 98504-4530  
(360) 902-5320 FAX (360) 902-4248  
E-Mail: [Apprentice@Lni.Wa.Gov](mailto:Apprentice@Lni.Wa.Gov)  
Internet: <http://www.lni.wa.gov/TradesLicensing/Apprenticeship/>

**NOTE:** This information WILL NOT be used to make changes to your program standard.

F100-512-000 information update request 02-2006



Teri Gardner 8-30-19

From which apprentices' wages rates are computed

From Matrix Service Inc. Industrial Pipefitter

Occupations	County(s)	Journey Level Wage Rate	Effective Date:
Industrial Pipefitter	Skagit & Whatcom Counties	\$39.24	8/30/2019