

# STANDARDS OF APPRENTICESHIP

DEVELOPED BY

*Three Affiliated Tribes*

FOR THE OCCUPATION(S) OF

**Carpenter  
Bricklayer  
Electrician  
Plumber**



APPROVED BY:

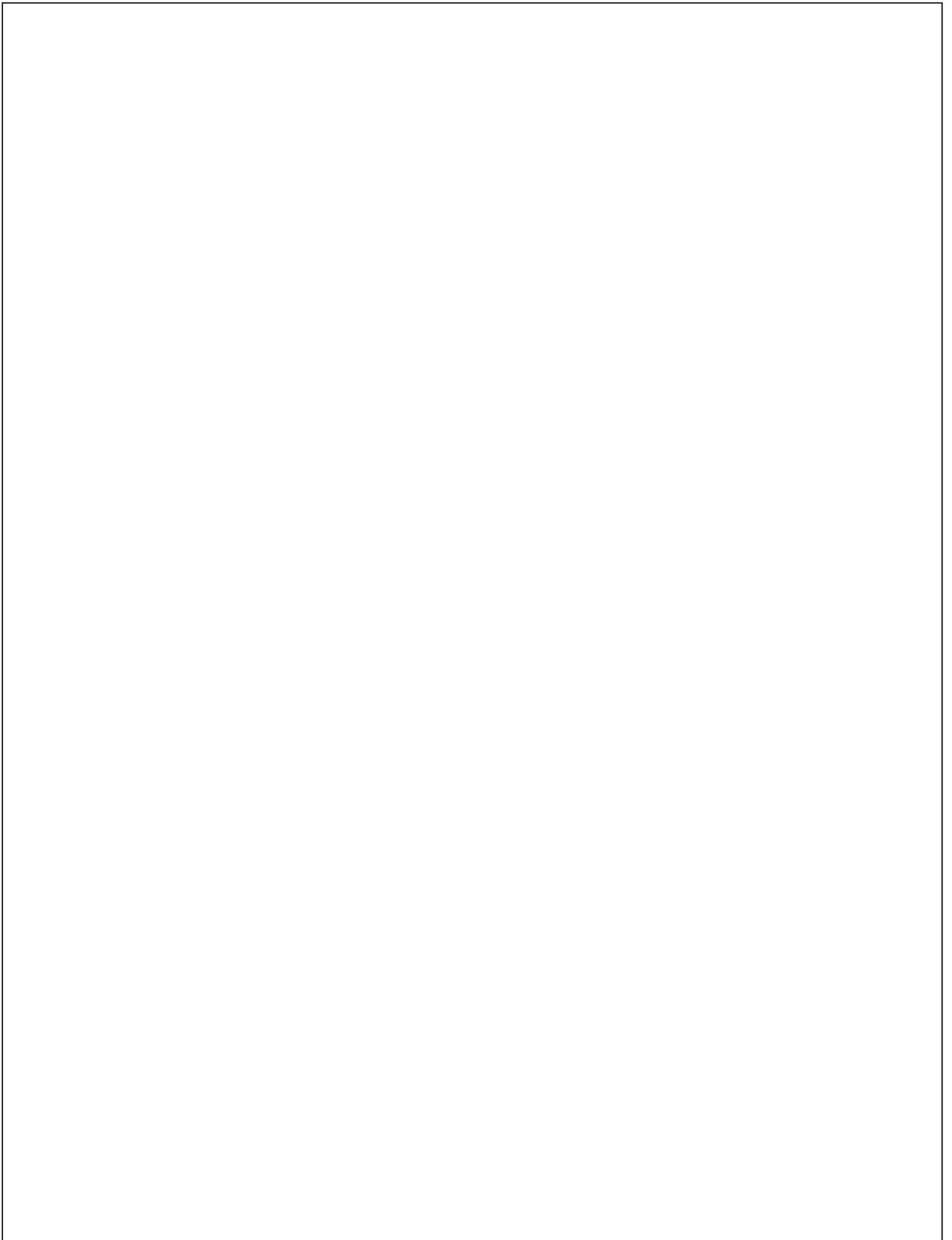
**U.S. Department of Labor  
*Office of Apprenticeship***

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**William B. Dutton, State Director**

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## FOREWORD

**Three Affiliated Tribes** Apprenticeship Standards have as their objective, the training of **Carpenters, Bricklayers, Plumbers, and Electricians**, skilled in all phases of the industry. The Sponsor recognizes that in order to accomplish this, there must be well-developed on-the-job learning combined with related instruction.

This recognition has resulted in the development of these Standards of Apprenticeship. They were developed in accordance with the basic standards recommended by the U.S. Department of Labor, Office of Apprenticeship, as a basis from which the Sponsor can work to establish an apprenticeship training program that meets the particular needs of the area.

## **DEFINITIONS**

**APPRENTICE:** Any individual employed by the employer meeting the qualifications described in the Standards of Apprenticeship who has signed an Apprenticeship Agreement with **Three Affiliated Tribes** providing for training and related instruction under these Standards, and who is registered with the Registration Agency.

**APPRENTICE ELECTRONIC REGISTRATION (AER):** Is an electronic tool that allows for instantaneous transmission of apprentice data for more efficient registration of apprentices and provides Program Sponsors with a faster turnaround on their submissions and access to their apprenticeship program data.

**APPRENTICESHIP AGREEMENT:** The written agreement between the apprentice and the Sponsor setting forth the responsibilities and obligations of all parties to the Apprenticeship Agreement with respect to the Apprentice's employment and training under these Standards. Each Apprenticeship Agreement must be registered with the Registration Agency.

**APPRENTICESHIP COMMITTEE (COMMITTEE):** Apprenticeship Committee (Committee) means those persons designated by the sponsor to act as an agent for the sponsor in the administration of the program. A committee may be either joint or non joint as follows:

- (1) A joint committee is composed of an equal number of representatives of the employer(s) and of the employees represented by a bona fide collective bargaining agent(s).
- (2) A non-joint committee which may also be known as a unilateral or group non-joint (may include workers) committee has employer representatives but does not have a bone fide collective bargaining agent as a participant.

**CERTIFICATE OF COMPLETION OF APPRENTICESHIP:** The Certificate of Completion of Apprenticeship issued by the Registration Agency to those registered apprentices certified and documented as successfully completing the apprentice training requirements outlined in these Standards of Apprenticeship.

**CERTIFICATE OF TRAINING:** A Certificate of Training may be issued by the U.S. Department of Labor's, Office of Apprenticeship Administrator to those registered apprentices documented as successfully completing an approved defined career lattice component of the apprentice training requirements as outlined in the Work Process Schedule of these Standards of Apprenticeship.

**COMPETENCY/PERFORMANCE-BASED OCCUPATION:** Competency/performance-based apprenticeship occupations are premised on attainment of demonstrated, observable and measurable competencies in lieu of meeting time-based work experience and on-the-job learning requirements. Therefore, work process schedules and related instruction outlines must specify approximate time of completion or

attainment of each competency, which can be applied toward the 2,000-hour minimum requirement (competencies demonstrated notwithstanding and assuming no credit for previous experience). In competency/performance-based occupations apprentices may accelerate the rate of competency achievement or take additional time beyond the approximate time of completion or attainment due the open entry and exit design.

**EMPLOYER:** Generally, an employer means any person or organization that employs an apprentice under these apprenticeship standards.

**HYBRID OCCUPATION:** In addition to time-based occupations which have a fixed set time for completion and competency/performance-based occupations, a third alternative has evolved which, in effect, is a “hybrid” of the two types of occupations previously mentioned. This third type of training method is basically a combination of time and performance considerations whereby work processes are developed with a minimum - maximum time/hours for each task or job requirement.

**INTERIM CREDENTIAL:** Interim Credential means a credential issued by the Registration Agency, upon request of the appropriate sponsor, as certification of competency attainment by an apprentice. Competency means the attainment of manual or technical skills and knowledge, as specified by an occupational standard. Program sponsors shall identify and define all interim credentials and include a list of them in their Program Standards. Interim credentials can only be issued for recognized components of an apprenticeable occupation as identified by an appropriate job task analysis.

**JOB CORPS CENTERS:** Any of the Federally-funded Job Corps Centers throughout the U.S. and Puerto Rico. Job Corps annually serves approximately 65,000 youth and young adults between 16-24 years of age. Sponsors who wish to hire Job Corps graduates trained in any occupation covered under these Standards, and who meets the minimum qualifications for apprenticeship, may do so via the *Direct Entry* provision described in *Appendix D Selection Procedures*.

**JOURNEYWORKER:** A recognized level of competency as recognized within the industry. Use of the term may also refer to a mentor, technician, specialist or other skilled worker.

or

An individual who has documented sufficient skills and knowledge of a trade, craft or occupation, either through formal apprenticeship or through practical on-the-job experience, and formal training. This individual is recognized by his/her employer as being fully qualified to perform the work of the trade, craft or occupation.

**O\*NET-SOC CODE:** The Occupational Information Network (O\*NET) codes and titles are based on the new Standard Occupational Classification (SOC) system mandated by the federal Office of Management and Budget for use in collecting statistical information on occupations. The O\*NET classification uses an 8-digit O\*NET-SOC code. Use of

the SOC classification as a basis for the O\*NET codes ensures that O\*NET information can be readily linked to labor market information such as occupational employment and wage data at the national, State, and local levels.

**ON-THE-JOB LEARNING (OJL):** Tasks learned on-the-job in which the apprentice must become proficient before a completion certificate is awarded. The learning must be through structured, supervised work experience.

**PROGRAM SPONSOR:** The Sponsor in whose name the Standards of Apprenticeship will be registered, and which will have the full responsibility for administration and operation of the apprenticeship program.

**REGISTERED APPRENTICESHIP PARTNERS INFORMATION DATA SYSTEM (RAPIDS):** The Federal system which provides for the automated collection, retention, updating, retrieval and summarization of information related to apprentices and apprenticeship programs.

**REGISTRATION AGENCY:** U.S. Department of Labor's, Office of Apprenticeship, or the recognized State Apprenticeship Agency.

**RELATED INSTRUCTION:** An organized and systematic form of instruction designed to provide the apprentice with knowledge of the theoretical and technical subjects related to his/her occupation.

**STANDARDS OF APPRENTICESHIP:** This entire document including all appendices and attachments hereto, and any future modifications or additions approved by the Registration Agency.

**SUPERVISOR OF APPRENTICE(S):** An individual designated by the program sponsor to supervise or have charge and direction of an apprentice.

**TIME-BASED OCCUPATION:** A time-based occupation requires a minimum of 2,000 hours of OJL and recommended 144 hours of related instruction, which includes an outline of the specific work processes and the approximate time requirement for each individual work process under that occupation.

**YOUTHBUILD U.S.A.:** YouthBuild is a youth and community development program that simultaneously addresses core issues facing low-income communities: housing, education, employment, crime prevention, and leadership development. In YouthBuild programs, low-income young people ages 16-24 work toward their GED or high school diploma, learn job skills and serve their communities by building affordable housing, and transform their own lives and roles in society.

## **SECTION I – PROGRAM ADMINISTRATION**

Program Sponsor's, at their discretion, may establish an Apprenticeship Training Committee (ATC) to carry out the responsibilities and duties required of a Program Sponsor as described in these Standards of Apprenticeship. If an ATC is established by the Program Sponsor, a list of the membership and the areas of expertise they represent must be provided to the Registration Agency. While the Office of Apprenticeship recommends that Program Sponsors utilize the services of an ATC, a sponsor may also elect to administer the program without the services of an ATC.

### **Structure of the Apprenticeship and Training Committee (ATC)**

- A. Members of the ATC will be selected by the groups they represent.
- B. Membership will be composed of representatives appointed by the Sponsor. A minimum of two members must be journeyworkers in one of the trades covered under this program.
- C. Technical Assistance - such as that from the U.S. Department of Labor, Office of Apprenticeship, State Apprenticeship Agencies, and vocational schools - may be requested to advise the ATC.

### **Administrative Procedures:**

- A. The ATC will elect a Chairperson and a Secretary, and will determine the time and place of regular meetings which will take place every **SIX (6)** month(s).
- B. The Chairperson and Secretary will have the power to vote on all questions affecting apprenticeship.
- C. The Chairperson and Secretary should rotate among members of the ATC.

### **Responsibilities of the Apprenticeship and Training Committee:**

- A. Cooperate in the selection of apprentices as outlined in this program.
- B. Ensure that apprentices are under a written Apprenticeship Agreement and register the local apprenticeship standards and agreements with the appropriate Registration Agency.
- C. Review and recommend apprenticeship activities in accordance with this program.

- D. Establish the minimum standards of education and experience required of apprentices.
- E. Meet at least every **SIX (6)** month(s) to review records and progress of each apprentice in training and recommend improvement or modification in training schedules, schooling and other training activities. Written minutes of the meeting will be kept.
- F. Determine the quality and quantity of experience on the job which apprentices should have and to make every effort toward their obtaining it.
- G. Hear and resolve all complaints of violation of Apprenticeship Agreements.
- H. Arrange tests or evaluations for determining the apprentice's progress in manipulative skills and technical knowledge.
- I. Maintain a record of all apprentices, showing their education, experience, and progress in learning the occupation.
- J. Determine the physical fitness of qualified applicants to perform the work of the occupation that may require a medical examination prior to their employment as apprentices.
- K. Advise apprentices on the need for accident prevention and provide instruction with respect to safety in the workplace.
- L. Certify that apprentices have successfully completed their apprenticeship program.
- M. Notify the appropriate Registration Agency of all new apprentices to be registered, credit granted, suspensions for any reason, reinstatements, extensions, completions and cancellations with explanation of causes and notice of completions of Apprenticeship Agreements.
- N. Supervise all the provisions of the local standards and be responsible, in general, for the successful operation of the standards by performing the duties here listed by cooperating with public and private agencies which can be of assistance by obtaining publicity to develop public support of apprenticeship and by keeping in constant touch with all parties concerned; apprentices, employers and journeyworkers.

**SECTION II - EQUAL OPPORTUNITY PLEDGE – Title 29 CFR 29.5(b)(20) and 30.3(b)**

The recruitment, selection, employment, and training of apprentices during their apprenticeship, shall be without discrimination because of race, color, religion, national origin, or sex. The Sponsor will take affirmative action to provide equal opportunity in apprenticeship and will operate the apprenticeship program as required under Title 29 of the Code of Federal Regulations (CFR), part 30, as amended.

**SECTION III - AFFIRMATIVE ACTION PLAN – Title 29 CFR 29.5(b) and 30.4**

If the Sponsor employs five or more apprentices, the Sponsor will adopt an Affirmative Action Plan and Selection Procedures as required under Title 29, CFR part 30. It will be attached as Appendix C.

**SECTION IV- QUALIFICATIONS FOR APPRENTICESHIP – Title 29 CFR 29.5(b)(10)**

Applicants will meet the following minimum qualifications:

A. Age

Apprentices must not be less than 16 years of age.

B. Education

A high school diploma or GED equivalency is required. Applicant must provide an official transcript(s) for high school and post high school education and training. All GED records must be submitted if applicable.

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.

C. Physical

Applicants will be physically capable of performing the essential functions of the apprenticeship program, with or without a reasonable accommodation, and without posing a direct threat to the health and safety of the individual or others.

Applicants will pass a physical agility test, fitness test, or be screened for the current illegal use of drugs on acceptance into the program and prior to being employed.

## **SECTION V - SELECTION OF APPRENTICES – Title 29 CFR 30.5**

Selection into the apprenticeship program will be in accordance with the selection procedures made a part of these Standards (Appendix D).

## **SECTION VI - APPRENTICESHIP AGREEMENT – Title 29 CFR 29.5(b)(11)**

After an applicant for apprenticeship has been selected, but before employment as an apprentice or enrollment in related instruction, the apprentice will be covered by a written Apprenticeship Agreement (Appendix B) signed by the Sponsor and the apprentice and approved by and registered with the Registration Agency. Such agreement will contain a statement making the terms and conditions of these standards a part of the agreement as though expressly written therein. A copy of each Apprenticeship Agreement will be furnished to the apprentice, the Sponsor, the Registration Agency, and the employer. An additional copy will be provided to the Veteran's State Approving Agency for those veteran apprentices desiring access to any benefits to which they are entitled.

Prior to signing the Apprenticeship Agreement, each selected applicant will be given an opportunity to read and review these Standards, the Sponsor's written rules and policies and the Apprenticeship Agreement.

The Registration Agency will be advised promptly of the execution of each Apprenticeship Agreement and will be given all the information required for registering the apprentice.

## **SECTION VII - RATIO OF APPRENTICES TO JOURNEYWORKERS – Title 29 CFR 29.5(b)(7)**

Consistent with proper supervision, training, safety, and continuity of employment throughout the apprenticeship, the ratio of apprentices to journeyworkers will be **ONE (1)** apprentice to **ONE (1)** journeyworker. This ratio should provide the number of **Carpenters, Bricklayers, Plumbers, and Electricians** necessary for the future needs of the employer.

## **SECTION VIII - TERM OF APPRENTICESHIP – Title 29 CFR 29.5(b)(2)**

The term of the occupation for **Carpenter** will be **4 years** with an (OJL) attainment of **(8000 HOURS)** supplemented by the required hours of related instruction as stated on the Work Process Schedule and Related Instruction Outline (Appendix A). See attached Work Processes for other remaining occupations. Full credit will be given for the probationary period.

## **SECTION IX - PROBATIONARY PERIOD – Title 29 CFR 29.5(b)(8), (b)(19)**

All applicants selected for apprenticeship will serve a probationary period of not less than **(SIX MONTHS) (1000 HOURS)** of OJL.

During the probationary period either the apprentice or the Sponsor may terminate the Apprenticeship Agreement, without stated cause, by notifying the other party in writing. The records for each probationary apprentice will be reviewed prior to the end of the probationary period. Records may consist of periodic reports regarding progression made in both the OJL and related instruction, and any disciplinary action taken during the probationary period.

Any probationary apprentice evaluated as satisfactory after a review of the probationary period will be given full credit for the probationary period and continue in the program.

After the probationary period the Apprenticeship Agreement may be canceled at the request of the apprentice, or may be suspended or canceled by the Sponsor for reasonable cause after documented due notice to the apprentice and a reasonable opportunity for corrective action. In such cases, the Sponsor will provide written notice to the apprentice and to the Registration Agency of the final action taken.

## **SECTION X - HOURS OF WORK**

Apprentices will generally work the same hours as journeymen, except that no apprentice will be allowed to work overtime if it interferes with attendance in related instruction classes.

Apprentices who do not complete the required hours of OJL during a given segment will have the term of that segment extended until the required number of hours of training are accrued.

## **SECTION XI - APPRENTICE WAGE PROGRESSION – Title 29 CFR 29.5(b)(5)**

Apprentices will be paid a progressively increasing schedule of wages during their apprenticeship based on the acquisition of increased skill and competence on-the-job and in related instruction. Before an apprentice is advanced to the next segment of training or to journeyworker status, the Sponsor will evaluate all progress to determine whether advancement has been earned by satisfactory performance in their OJL and in related instruction courses. In determining whether satisfactory progress has been made, the Sponsor will be guided by the work experience and related instruction records and reports.

The progressive wage schedule will be an increasing percentage of the journeyworker wage rate. The percentages that will be applied to the applicable journeyworker rate are shown on the attached Work Process Schedule and Related Instruction Outline (Appendix A). In no case will the starting wages of apprentices be less than that required by any minimum wage law which may be applicable.

## **SECTION XII - CREDIT FOR PREVIOUS EXPERIENCE – Title 29 CFR 29.5(b)(12) and 30.4(c)(8)**

The Sponsor may grant credit towards the term of apprenticeship to new apprentices who demonstrate previous acquisition of skills or knowledge equivalent to that which would be received under these Standards.

Apprentice applicants seeking credit for previous experience gained outside the supervision of the Sponsor must submit the request at the time of application and furnish such records, affidavits, and other **REQUIRED DOCUMENTATION** to substantiate the claim. Applicants requesting such credit who are selected into the apprenticeship program will start at the beginning wage rate. The request for credit will be evaluated and a determination made by the Sponsor during the probationary period when actual on-the-job and related instruction performance can be examined. Prior to completion of the probationary period, the amount of credit to be awarded will be determined after review of the apprentice's previous work and training/education record and evaluation of the apprentice's performance and demonstrated skill and knowledge during the probationary period.

An apprentice granted credit will be advanced to the wage rate designated for the period to which such credit accrues. The Registration Agency will be advised of any credit granted and the wage rate to which the apprentice is advanced.

The granting of advanced standing will be uniformly applied to all apprentices.

### **SECTION XIII - WORK EXPERIENCE – Title 29 CFR 29.5(b)(3) and 30.8**

During the apprenticeship the apprentice will receive such OJL and related instruction in all phases of the occupation necessary to develop the skill and proficiency of a skilled journeyworker. The OJL will be under the direction and guidance of the supervisor of the apprentice(s).

### **SECTION XIV - RELATED INSTRUCTION – Title 29 CFR 29.5(b)(4)**

During each segment of training each apprentice is required to participate in coursework related to the job as outlined in Appendix A. For each occupation, the recommended term of apprenticeship will include no less than 144 hours of related instruction for the **Carpenter, Bricklayer, Plumbers, and Electrician** for each year of the apprenticeship. Apprentices agree to take such courses as the Sponsor deems advisable. The Sponsor will secure the instructional aides and equipment it deems necessary to provide quality instruction. In cities, towns or areas having no vocational school or other schools that can furnish related instruction; the apprentice may be required to take an alternate form of instruction that meets the approval of the Sponsor and the Registration Agency.

Apprentices **“will not”** be paid for hours spent attending related instruction classes.

If applicable, the Sponsor will inform each apprentice of the availability of college credit through the **North Dakota State College of Science**.

Any apprentice who is absent from related instruction classes, unless officially excused, will satisfactorily complete all course work missed before being advanced to the next period of training. In cases of failure of an apprentice to fulfill the obligations regarding related instruction (or OJL) without due cause, the Sponsor will take appropriate disciplinary action and may terminate the Apprenticeship Agreement after due notice to the apprentice and opportunity for corrective action.

To the extent possible, related instruction will be closely correlated with the practical experience and training received on-the-job. The Sponsor will monitor and document the apprentice’s progress in related instruction classes.

The Sponsor will secure competent instructors whose knowledge, experience, and ability to teach will be carefully examined and monitored.

## **SECTION XV - SAFETY AND HEALTH TRAINING – Title 29 CFR 29.5(b)(9)**

All apprentices will receive instruction in safe and healthful work practices both on-the-job and in related instruction that are in compliance with the Occupational Safety and Health Standards promulgated by the Secretary of Labor under 29 U.S.C. 651 et seq., as amended, dated December 29, 1970, and subsequent amendments to that law, or State Standards that have been found to be at least as effective as the Federal Standards

Apprentices will be taught that accident prevention is very largely a matter of education, vigilance, and cooperation and that they should strive at all times to conduct themselves in their work to ensure their own safety and that of their fellow workers.

## **SECTION XVI - SUPERVISION OF APPRENTICES – Title 29 CFR 29.5(b)(14)**

The Sponsor will be responsible for the training of the apprentice on the job. Apprentices will be under the general supervision of the Sponsor and under the direct supervision of the journeyworker to whom they are assigned. The supervisor of apprentice(s) designated by the employer will be responsible for the apprentice's work assignments, and will ensure the apprentice is working under the supervision of a skilled journeyworker, evaluation of work performance, and completion and submittal of progress reports to the Sponsor.

No apprentice will be allowed to work without direct journeyworker supervision.

## **SECTION XVII - RECORDS AND EXAMINATIONS – Title 29 CFR 29.5(b)(6)**

Each apprentice may be responsible for maintaining a record of his/her work experience/training on-the-job and in related instruction and for having this record verified by his/her supervisor at the end of each week. The apprentice will authorize an effective release of their completed related instruction records from the local school authorities to the Sponsor. The record cards and all data, written records of progress evaluations, corrective and final actions pertaining to the apprenticeship, will be maintained by and will be the property of the Sponsor. This record will be included in each apprentice's record file maintained by the Sponsor.

Before each period of advancement, or at any other time when conditions warrant, the Sponsor will evaluate the apprentice's record to determine whether he/she has made satisfactory progress. If an apprentice's related instruction or on-the-job progress is found to be unsatisfactory, the Sponsor may determine whether the apprentice will continue in a probationary status, or require the apprentice to repeat a process or series of processes before advancing to the next wage classification. In such cases, the Sponsor will initiate a performance improvement plan with the apprentice.

Should it be found that the apprentice does not have the ability or desire to continue the training to become a journeyworker, the Sponsor will, after the apprentice has been given adequate assistance and opportunity for corrective action, terminate the Apprenticeship Agreement.

#### **SECTION XVIII - MAINTENANCE OF RECORDS – Title 29 CFR 29.5(b)(22)**

The Sponsor will maintain for a period of five (5) years from the date of last action, all records relating to apprentice applications (whether selected or not), the employment and training of apprentices, and any other information relevant to the operation of the program. This includes, but is not limited to, records on the recruitment, application and selection of apprentices, and records on the apprentice's job assignments, promotions, demotions, layoffs, terminations, rate of pay, or other forms of compensation, hours of work and training, evaluations, and other relevant data. The records will permit identification of minority and female (minority and non-minority) participants. These records will be made available on request to the Registration Agency.

#### **SECTION XIX. - CERTIFICATE OF COMPLETION OF APPRENTICESHIP – Title 29 CFR 29.5(b)(15)**

Upon satisfactory completion of the requirements of the apprenticeship program as established in these Standards, the Sponsor will so certify in writing to the Registration Agency and request that a Certificate of Completion of Apprenticeship be awarded to the completing apprentice(s). Such requests will be accompanied by the appropriate documentation for both the OJL and the related instruction as may be required by the Registration Agency.

**Certificate of Training** - A Certificate of Training may be issued by the U.S. Department of Labor's, Office of Apprenticeship Administrator to those registered apprentices documented as successfully completing a defined career lattice component of the apprentice training requirements as outlined in the Work Process Schedule of these Standards of Apprenticeship.

#### **SECTION XX - NOTICE TO REGISTRATION AGENCY – Title 29 CFR 29.5(b)(18)**

The Registration Agency will be notified promptly of all new apprentices to be registered, credit granted, suspensions for any reason, reinstatements, extensions, modifications, completions, cancellations, and terminations of Apprenticeship Agreements and causes.

## **SECTION XXI - CANCELLATION AND DEREGISTRATION – Title 29 CFR 29.5(b)(17)**

These Standards will, upon adoption by the Sponsor be submitted to the Registration Agency for approval. Such approval will be acquired before implementation of the program.

**Three Affiliated Tribes** reserves the right to discontinue at any time the apprenticeship program set forth herein. The Registration Agency will be notified promptly in writing of any decision to cancel the program.

Deregistration of these Standards may be initiated by the Registration Agency for failure of the Sponsor to abide by the provisions herein. Such deregistration will be in accordance with the Registration Agency's regulations and procedures.

Within fifteen (15) days of cancellation of the apprenticeship program (whether voluntary or involuntary), the *Sponsor* will notify each apprentice of the cancellation and the effect of same. This notification will conform to the requirements of Title 29, CFR part 29.7.

## **SECTION XXII - AMENDMENTS OR MODIFICATIONS – Title 29 CFR 29.5(b)(17)**

These Standards may be amended or modified at any time by the Sponsor provided that no amendment or modification adopted will alter any Apprenticeship Agreement in force at the time without the consent of all parties. Such amendment or modification will be submitted to the Registration Agency for approval and registration prior to being placed in effect. A copy of each amendment or modification adopted will be furnished to each apprentice to whom the amendment or modification applies.

## **SECTION XXIII - ADJUSTING DIFFERENCES/COMPLAINT PROCEDURE – Title 29 CFR 29.5(b)(21) and 30(11)**

The Sponsor will have full authority to supervise the enforcement of these Standards. Its decision will be final and binding on the employer, the sponsor, and the apprentice, unless otherwise noted below.

If an applicant or an apprentice believes an issue exists that adversely affects his/her participation in the apprenticeship program or violates the provisions of the Apprenticeship Agreement or Standards, relief may be sought through one or more of the following avenues, based on the nature of the issue:

### **Title 29 CFR 29.5 (b)(21)**

The Sponsor will hear and resolve all complaints of violations concerning the Apprenticeship Agreement and the registered Apprenticeship Standards, for which written notification is received within fifteen (15) days of violations. The Sponsor will make such rulings as it deems necessary in each individual case and within thirty (30) days of receiving the written notification. Either party to the Apprenticeship Agreement may consult with the Registration Agency for an interpretation of any provision of these Standards over which differences occur. The name and address of the appropriate authority to receive, process and make disposition of complaints

is: **Dewey Hosie,  
TERO Director  
Three Affiliated Tribes  
304 Main Street  
New Town, ND 58763**

### **Title 29 CFR 30.11**

Any apprentice or applicant for apprenticeship who believes that he/she has been discriminated against on the basis of race, color, religion, national origin, or sex, with regard to apprenticeship or that the equal opportunity standards with respect to his/her selection have not been followed in the operation of an apprenticeship program, may personally or through an authorized representative, file a complaint with the Registration Agency or, at the apprentice or applicant's election, with the private review body established by the Program Sponsor.

The complaint will be in writing and will be signed by the complainant. It must include the name, address, and telephone number of the person allegedly discriminated against, the Program Sponsor involved, and a brief description of the circumstances of the failure to apply equal opportunity standards.

The complaint must be filed not later than one hundred eighty (180) days from the date of the alleged discrimination or specified failure to follow the equal opportunity standards, and in the case of complaints filed directly with the review body designated by the Program Sponsor to review such complaints, any referral of such complaint by the complainant to the Registration Agency must occur within the time limitation stated above or thirty (30) days from the final decision of such review body, whichever is later. The time may be extended by the Registration Agency for good cause shown.

Complaints of discrimination in the apprenticeship program may be filed and processed under Title 29, CFR part 30, and the procedures as set forth above.

The Sponsor will provide written notice of its complaint procedure to all applicants for apprenticeship and all apprentices.

#### **SECTION XXIV - TRANSFER OF TRAINING OBLIGATION – Title 29 CFR 29.5(13)**

If the Sponsor is unable to fulfill his/her training obligation due to lack of work or failure to conform to these Standards the Sponsor will make every effort to refer the apprentice with his/her consent to another employer, Registration Agency or One Stop for placement into another registered apprenticeship program. This will provide the apprentice an opportunity for continuous employment and completion of their apprenticeship program. The Sponsor will also make available to the apprentice and the receiving employer the apprentice's training record. The apprentice must receive credit from the new employer for the training already satisfactorily completed.

#### **SECTION XXV - RESPONSIBILITIES OF THE APPRENTICE**

Apprentices, having read these Standards formulated by the Sponsor and signed an Apprenticeship Agreement with the Sponsor agree to all the terms and conditions contained therein and agree to abide by the Sponsor's rules and policies, including any amendments, serve such time, perform such manual training, and study such subjects as the Sponsor may deem necessary to become a skilled **Carpenter, Bricklayer, Plumber, and Electrician.**

In signing the Apprenticeship Agreement, apprentices assume the following responsibilities and obligations under the apprenticeship program:

- A. Perform diligently and faithfully the work of the occupation and other pertinent duties assigned by the Sponsor and the employer in accordance with the provisions of these Standards.
- B. Respect the property of the employer and abide by the working rules and regulations of the employer.
- C. Attend and satisfactorily complete the required hours in the OJL and in related instruction in subjects related to the occupation as provided under these Standards.
- D. Maintain and make available such records of work experience and training received on-the-job and in related instruction as may be required by the Sponsor.
- E. Develop and practice safe working habits and work in such a manner as to assure his/her personal safety and that of other fellow workers.

- F. The apprentice will be provided with a copy of the written rules and policies and will sign an acknowledgment receipt of same. This procedure will be followed whenever revisions or modifications are made to the rules and policies.

## **SECTION XXVI - TECHNICAL ASSISTANCE**

Technical Assistance such as that from the U.S. Department of Labor, Office of Apprenticeship, State Apprenticeship Agencies, and vocational schools—may be requested to advise the Sponsor.

The Sponsor is encouraged to invite representatives from industry, education, business, private and/or public agencies to provide consultation and advice for the successful operation of their training program.

**SECTION XXVII - OFFICIAL ADOPTION OF APPRENTICESHIP STANDARDS:**

**The Three Affiliated Tribes hereby adopts these Standards of Apprenticeship on this 10<sup>th</sup> Day of June, 2009.**

\_\_\_\_\_  
**Signature of Sponsor**

\_\_\_\_\_  
**Printed Name**

## Appendix A

### OCCUPATION SCHEDULE FOR: Carpenter

**O\*NET-SOC CODE: 47-2031.00**

**RAPIDS CODE: 0067HY**

This schedule is attached to and a part of these Standards for the above identified occupation.

**1. TERM OF APPRENTICESHIP**

The term of the occupation shall be **2 ½- 4 Years** with an OJL attainment of **5200-8000 hours** supplemented by the required hours of related instruction.

**2. RATIO OF APPRENTICES TO JOURNEYWORKERS**

One (1) apprentice may be employed in each shop department, and/or jobsite employing (1) one qualified journeyworker.

**3. APPRENTICE WAGE SCHEDULE**

Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate.

**4 Year Term Example:**

1 <sup>st</sup>	1000 hours = <u>80%</u>	2 <sup>nd</sup>	1000 hours = <u>83%</u>
3 <sup>rd</sup>	1000 hours = <u>85%</u>	4 <sup>th</sup>	1000 hours = <u>88%</u>
5 <sup>th</sup>	1000 hours = <u>90%</u>	6 <sup>th</sup>	1000 hours = <u>93%</u>
7 <sup>th</sup>	1000 hours = <u>95%</u>	8 <sup>th</sup>	1000 hours = <u>97%</u>

Current Journeyworker wage rate is **\$15.05**

**4. SCHEDULE OF WORK EXPERIENCE (See attached Work Process Schedule)**

The Sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

**5. SCHEDULE OF RELATED INSTRUCTION (See attached Related Instruction Outline)**

## WORK PROCESS SCHEDULE

**Occupational Title: CARPENTER**

**O'NET CODE: 47-2031.00**

**RAPIDS CODE: 0067HY**

### **Description:**

Constructs, erects, installs, and repairs structures and fixtures of wood, plywood, and wallboard, using carpenter's handtools and power tools, and conforming to local building codes: Studies blueprints, sketches, or building plans for information pertaining to type of material required, such as lumber or fiberboard, and dimensions of structure or fixture to be fabricated. Selects specified type of lumber or other materials. Prepares layout, using rule, framing square, and calipers. Marks cutting and assembly lines on materials, using pencil, chalk, and marking gauge. Shapes materials to prescribed measurements, using saws, chisels, and planes. Assembles cut and shaped materials and fastens them together with nails, dowel pins, or glue. Verifies trueness of structure with plumb bob and carpenter's level. Erects framework for structures and lays subflooring. Builds stairs and lays out and installs partitions and cabinet work. Covers subfloor with building paper to keep out moisture and lays hardwood, parquet, and wood-strip-block floors by nailing floors to subfloor or cementing them to mastic or asphalt base. Applies shock-absorbing, sound-deadening, and decorative paneling to ceilings and walls. Fits and installs prefabricated window frames, doors, door frames, weather stripping, interior and exterior trim, and finish hardware, such as locks, letterdrops, and kick plates. Constructs forms and chutes for pouring concrete. Erects scaffolding and ladders for assembling structures above ground level. May weld metal parts to steel structural members.

### **On-The-Job Training:**

	<u>Approx. Hrs.</u>
A. <u>Tools and Materials</u>	325 - 500
1. Care, cleaning, and safe use of tools, measuring devices and woodworking machinery	
2. Identifying trade materials and their uses	
B. <u>Form Building</u>	780 - 1200
1. Building and placing straight concrete forms; irregular concrete forms; concrete forms for footings, stairways, floor, walls, columns	

2. Stripping and salvaging forms for re-use
3. Locating and erecting forms for ground-mounted solar collector systems (optional)

### Rough Framing

C. Framing floors, walls, roofs, stairs, scaffolding - on both houses and heavy construction 780 – 1200

1. Laying out mud sills or plates for anchoring
2. Placing girders or beams
3. Installing sills
4. Placing and bracing girder posts
5. Installing and bridging floor joists
6. Laying out stair well
7. Laying sub-floors
8. Laying out story-poles
9. Constructing, installing and bracing wall frames
10. Trimming for openings
11. Framing and placing ceiling joists
12. Framing roofs; laying roof decking
13. Roof covering (if in keeping with area practice)
14. Building and erecting scaffolding
15. Using builder's level

### D. Layout

Batterboards, partitions, doors and windows, box-out in concrete walls, stairs and roofs 325 - 500

E. Outside Finishing 520 – 800

1. Putting on insulation board or housewrap for all types of walls (if in keeping with area practice)
2. Laying-out and installing door frames and jambs
3. Laying-out and installing window frames
4. Fitting and sanding doors and windows
5. Applying exterior door and window trim and hardware
6. Applying insulation (if in keeping with area practice)
7. Cutting and installing water tables
8. Constructing and applying all types of cornice and soffit
9. Finishing gable ends
10. Constructing verge or bargeboards
11. Installing gutters (if in keeping with area practice)

12. Constructing and setting columns
13. Constructing and setting newels and railings
14. Constructing porches and entrance canopies
15. Applying outside wall coverings (in keeping with area practice)
16. Laying out, constructing and setting louvers
17. Installing other exterior trim
18. Applying all hardware and fittings to outside of building

F. Inside Finishing

975-1500

1. Fitting, sanding, installing doors and windows
2. Applying interior door and window trim
3. Applying hardware and fittings to interior of building, doors and windows
4. Applying baseboards and moldings
5. Applying interior trim
6. Constructing and setting cupboards, cabinets and wardrobes
7. Constructing and setting stairwork
8. Preparing sub-floor and applying finished wood flooring
9. Laying other types of finished flooring (in keeping with the carpenter craft and prevailing area practices)

G. Acoustics and Drywall

650-1000

1. Ceilings - Laying out, cutting, assembling and installing materials and component parts:
  - a. Hangers, channels, furring and backing boards
  - b. Bars: main tees, cross tees, splines
  - c. Stiffeners and braces
  - d. Ceiling angles or moldings
  - e. Finish ceiling materials
  
2. Walls and Partitions - Laying out, cutting, assembling, erecting, applying materials and component parts:
  - a. Floor and ceiling runners
  - b. Studs (wood and metal), stiffeners, bracing, fireblocking
  - c. Resilient and furring channels
  - d. Laying out, framing, enclosing vents, light wells, other openings
  - e. Wall angles and moldings
  - f. Soffit work
  - g. Drywall installation on metal framing

- h. Studless and laminated installations
- i. Thermal and sound insulation, if in keeping with area practice
- j. Backing and finish materials
- k. Fire proofing columns, beams chases

H. Welding & Cutting 325-500

- 1. Welding as it applies to the trade
- 2. Conducting oxyacetylene cutting operations
- 3. Safety

I. Plastics and Resilients 195 - 300

- 1. Knowing various types of materials and their uses
- 2. Laying out, cutting, welding, installing

J. Hazardous Materials (optional) 65 - 100

- 1. Asbestos abatement
- 2. Handling and disposing of other hazardous materials

K. Miscellaneous (in keeping with area practices) 260-400

- 1. Safety
- 2. Rigging and signaling
- 3. Ensuring conformity of design and materials blueprint, plans and specifications
- 4. Building walkway
- 5. Erecting shoring
- 6. Building sheds
- 7. Building weather protection devices and structures
- 8. Erecting fencing

**TOTAL HOURS 5200-8000**

## Appendix B

### OCCUPATION SCHEDULE FOR: Electrician

**O\*NET-SOC CODE: 47-2111.00**

**RAPIDS CODE: 0159**

This schedule is attached to and a part of these Standards for the above identified occupation.

#### 1. TERM OF APPRENTICESHIP

The term of the occupation shall be **4 Years** with an OJL attainment of **8000 hours** supplemented by the required hours of related instruction.

#### 2. RATIO OF APPRENTICES TO JOURNEYWORKERS

One (1) apprentice may be employed in each shop department, and/or jobsite employing (1) one qualified journeyworker.

#### 3. APPRENTICE WAGE SCHEDULE

Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate.

##### **4 Year Term Example:**

1 <sup>st</sup>	1000 hours = <u>80%</u>	2 <sup>nd</sup>	1000 hours = <u>83%</u>
3 <sup>rd</sup>	1000 hours = <u>85%</u>	4 <sup>th</sup>	1000 hours = <u>88%</u>
5 <sup>th</sup>	1000 hours = <u>90%</u>	6 <sup>th</sup>	1000 hours = <u>93%</u>
7 <sup>th</sup>	1000 hours = <u>95%</u>	8 <sup>th</sup>	1000 hours = <u>97%</u>

Current Journeyworker wage rate is **\$18.35**

#### 4. SCHEDULE OF WORK EXPERIENCE (See attached Work Process Schedule)

The Sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

#### 5. SCHEDULE OF RELATED INSTRUCTION (See attached Related Instruction Outline)

## **WORK PROCESS SCHEDULE**

**Occupational Title:     ELECTRICIAN**

**DOT Code:             824.261-010**

**O\*Net Code:         47-2111.00**

**RAIS Code:                     0159**

### **Description:**

Plans layout, installs, and repairs wiring, electrical fixtures, apparatus, and control equipment: Plans new or modified installations to minimize waste of materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring, consistent with specifications and local electrical codes.

Prepares sketches showing location of wiring and equipment, or follows diagrams or blueprints, ensuring that concealed wiring is installed before completion of future walls, ceilings, and flooring.

Measures, cuts, bends, threads, assemble, and installs electrical conduit, using tools, such as hacksaw, a pipe threader, and conduit bender. Electricians will pull wiring through conduit and splice wires by stripping insulation from terminal leads, using a knife or pliers, twist or soldering wires together, and applying tape or terminal caps.

Connects wiring to lighting fixtures and power equipment, using hand tools. Installs control and distribution apparatus, such as switches, relays, and circuit-breaker panels, fastening in place with screws or bolts, using hand tools and power tools.

Connects power cables to equipment, such as electric range or motor, and installs grounding leads.

Electricians will be able to test continuity of circuit(s) to ensure electrical compatibility and safety of components, using testing instruments, such as ohmmeter, battery and buzzer, and oscilloscope.

Observes functioning of installed equipment or system to detect hazards and need for adjustments, relocation, or replacement.

Electricians may repair faulty equipment or systems. May cut and weld steel structural members, using flame-cutting and welding equipment.

Electricians will be required to hold license.

**On-the-Job Training:**

**APPROXIMATE  
HOURS**

**1. Preliminary Work**

**600**

- A. Learning the names and uses of the equipment used in the trade, such as kind, size, and use of cable, wire, boxes, conduits, and fittings, switches, receptacles, service switches, cutouts, etc
- B. Learning names and uses of the various tools used in assembling this material, care of these tools, and other instructions necessary to familiarize the apprentice with the material and tools of the trade.
- C. Safety

**2. Residential and Commercial Rough Wiring**

**2500**

- A. Assisting in getting materials for job from supplier or stockroom.
- B. Loading truck with job supplies and unloading materials, tools, and other equipment on the jobsite.
- C. Laying out the various outlets, switches, receptacles, and other details of the job from blueprints or by direction of the Superintendent of construction.
- D. Laying out the system with materials to be used, where they are to be placed, and other details as to how they shall be run.
- E. Cutting wires, cables, conduit and raceway; threading and reaming conduit, boring and cutting chases under the direction of the Journeyman.
- F. Installing various kinds of wires, cables and conduits in accordance with requirements (codes).
- G. Assisting journeyman in pulling wires, attaching wires to fish tape, and protects wires from different kinds of abrasions.
- H. Connecting conductors to switches, receptacles, or appliances with proper methods of splicing, soldering and taping.
- I. Installing service switches or load center and subfeeders and fastening up these parts, running raceways and pulling in conductors under the direction of journeyman electricians.

J. Assisting in preparing lists of materials used, including names, number of pieces, or number of feet, etc., for office records.

K. Loading unused material and cleaning up job area.

**3. Residential and Commercial finish Work 1500**

A. Connecting and setting switches, receptacles, plates, etc.

B. Installing proper size and types of fuses for each circuit.

C. Installing and connecting various kinds of fixtures.

D. Tracing and polarity of conductors and devices.

E. Testing the circuit for grounds and shorts and locating and correcting job defects.

F. Assisting journey person in installing and completion of the National Board of Fire Underwriters and special local regulations- proper sizes of wires, services, conduits, etc.

**4. Industrial Lighting and Service Installation 2000**

A. Installing rigid conduit, electric metallic tubing BX armored cable wiremolds on all types of heavy electrical equipment and major-size service entrance installation.

B. Wiring all types (gas, oil, stoker, etc.) of heating equipment.

C. Installing wiring and controls for air conditioning.

**5. Troubleshooting 1000**

A. Repairing all kinds of electrical work.

B. Checking out trouble and making repairs under supervision of electrician.

C. Checking out trouble and making repairs without supervision.

**6. Motor Installation and Control 400**

A. Installing overcurrent devices.

B. Checking for proper installation and rotation.

C. Installing replacement motors.

D. Analyzing motor circuits and trouble- shooting.

E. Installing emergency generators and controls.

F. Installing pushbuttons, pilot lights, relays, timing devices, and interlocking controls.

**Total    8000**

**Related Instruction:**

The apprentice shall receive theoretical related instruction for a minimum of 144 hours per year, for each year of their apprenticeship, in all aspects of the trade listed below:

**FIRST YEAR**

Safety instruction  
History  
Present and future of the trade  
Trade jargon  
Tools and equipment  
Mathematics  
Applied Science  
Introduction to Electricity and Electronics  
blueprint reading and specifications

**SECOND YEAR**

Mathematics for electronics  
Electrical wiring, residential  
Residential blueprint reading  
D.C. Fundamentals and circuits  
Technical communications

**THIRD YEAR**

Geometry and trigonometry  
Applied physics  
Mathematics for electricians II  
Motors and generators  
Commercial and industrial blueprint reading  
Electrical wiring, commercial

**FOURTH YEAR**

Electrical wiring, industrial  
Transformers  
Electrical drafting  
Applied electronics for industry  
Electrical machinery  
Analysis and repair  
Social economics  
Advanced blueprint reading and layout

## Appendix C

### OCCUPATION SCHEDULE FOR: Plumber

**O\*NET-SOC CODE: 47-2152.00**

**RAPIDS CODE: 0432**

This schedule is attached to and a part of these Standards for the above identified occupation.

**1. TERM OF APPRENTICESHIP**

The term of the occupation shall be **4 Years** with an OJL attainment of **8000 hours** supplemented by the required hours of related instruction.

**2. RATIO OF APPRENTICES TO JOURNEYWORKERS**

One (1) apprentice may be employed in each shop department, and/or jobsite employing (1) one qualified journeyworker.

**3. APPRENTICE WAGE SCHEDULE**

Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate.

**4 Year Term Example:**

1 <sup>st</sup>	1000 hours = <u>80%</u>	2 <sup>nd</sup>	1000 hours = <u>83%</u>
3 <sup>rd</sup>	1000 hours = <u>85%</u>	4 <sup>th</sup>	1000 hours = <u>88%</u>
5 <sup>th</sup>	1000 hours = <u>90%</u>	6 <sup>th</sup>	1000 hours = <u>93%</u>
7 <sup>th</sup>	1000 hours = <u>95%</u>	8 <sup>th</sup>	1000 hours = <u>97%</u>

Current Journeyworker wage rate is **\$23.13**

**4. SCHEDULE OF WORK EXPERIENCE (See attached Work Process Schedule)**

The Sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

**5. SCHEDULE OF RELATED INSTRUCTION (See attached Related Instruction Outline)**

**WORK PROCESS SCHEDULE**  
**PLUMBER**

**ONET Code: 47:2152.0**

**Description:**

Assembles, installs, and repairs pipes, fittings, and fixtures of heating, water, and drainage systems, according to specifications and plumbing codes: Studies building plans and working drawings to determine work aids required and sequence of installations. Inspects structure to ascertain obstructions to be avoided to prevent weakening of structure resulting from installation of pipe. Locates and marks position of pipe and pipe connections and passage holes for pipes in walls and floors, using ruler, spirit level, and plumb bob. Cuts openings in walls and floors to accommodate pipe and pipe fittings, using handtools and power tools. Cuts and threads pipe, using pipe cutters, cutting torch, and pipe-threading machine. Bends pipe to required angle by use of pipe-bending machine or by placing pipe over block and bending it by hand. Assembles and installs valves, pipe fittings, and pipes composed of metals, such as iron, steel, brass, and lead, and nonmetals, such as glass, vitrified clay, and plastic, using handtools and power tools. Joins pipes by use of screws, bolts, fittings, solder, plastic solvent, and caulks joints. Fills pipe system with water or air and reads pressure gauges to determine whether system is leaking. Installs and repairs plumbing fixtures, such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, dishwashers, and water softeners. Repairs and maintains plumbing by replacing washers in leaky faucets, mending burst pipes, and opening clogged drains. May weld holding fixtures to steel structural members.

**Description of Duties:**

Possesses a clear understanding and detailed knowledge of the associated tools and equipment and their maintenance requirements, nomenclature and types of plumbing materials and supplies, technical manuals and procedures, safety procedures, and equipment and shop records. Uses shop tools, including operating tools and machines to bend, cut, thread, and hang cast iron, PVC, and copper piping. Installs and repairs plumbing systems and fixtures. Cuts opening in walls or floors for pipes; cuts, reams, threads, and bends pipes; and installs and connects fixtures and facilities such as hydrants, water mains, water closets, lavatories, showers, and sinks. Inspects and tests piping after completing repairs, alterations, and additions. Tile, caulks, and seals elbows, unions, joints, and fixtures. Interprets work orders, oral instructions, and sketches; provides specific information on work to be accomplished, location of work, nature of repairs required, and materials needed to accomplish work; and compiles and submits reports of plumbing performed. Installs equipment such as water heaters and garbage disposals and modifies existing equipment.

**On-The-Job Training:**

**APPROXIMATE**

## **HOURS**

### **GENERAL TRADE ORIENTATION 250**

- Care and use of tools
- Tests and measuring
- Types and uses of pipe, fittings, fixtures
- Equipment Repair records

### **GENERAL PIPE FITTING PRACTICE 2000**

- Bend iron, brass, copper pipe
- Cut, ream, thread, burr, drill, and assemble pipe
- Measure, cut, caulk cast iron pipe
- Cut soil pipe, seal and caulk joints
- Break and make joints for flanged piping, renew gaskets
- Wipe lead joints
- Care and use of oxygen/acetylene torch
- Care and use of welding equipment

### **SERVICE INSTALLATION 2000**

- Sketch and read blueprints-layout work
- Measure, plumb, square, level layout
- Make bills of material
- Cut openings
- Hang and brace pipe
- Make riggings and supports
- Install hot and cold water supply lines, valves, strainers, faucets, etc.
- Rough in drain in ground, suction and discharge lines
- Lay and connect drainage, soil pipe
- Install vent systems soil stacks
- Connect to main supply
- Connect to sewer
- Install radiators, heating, and ventilating units
- Install heating system controls

### **FIXTURE INSTALLATION 1250**

- Sinks and tubs
- Water closets and urinals
- Showers and shower controls
- Drinking fountains
- Sprinkler systems; hangers, wet and dry pipe, sprinkler heads

### **MAINTENANCE AND REPAIR 2000**

- Remove stoppages
- Stop leaks
- Repair/renew valves, faucets, connections, sprinkler heads

- Repair and reseal fixtures
- Repair and calibrate mechanical meters

**MISCELLANEOUS**

**500**

- Orientation
- Housekeeping
- Safety
- Activity not otherwise listed

**Total      8000**

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**RELATED TECHNICAL INSTRUCTION**  
**PLUMBER**

**DOT Code: 862.381-030**

**AIMS Code:**  
**0432**

<b>MATHEMATICS</b>	<b>135</b>
Practical arithmetic	
Basic algebra	
Plane geometry	
Trigonometry	
<b>TRADE DRAWINGS AND TECHNICAL DOCUMENTATION</b>	<b>135</b>
Blueprint reading	
Elementary architectural drawing	
Drawing and sketching	
Specification writing	
<b>RELATED TRADE COURSES</b>	<b>306</b>
Types of pipes and fittings	
Hot water heating piping systems	
Sewage systems	
Plumbing and pipe fitting tools	
Pipe fitting practice	
Welding practice	
Clay, iron, and vent systems	
Occupational Safety and Health Act	
Sanitary plumbing fixtures	
Installation of gas appliances and piping	

**Total 576**

## Appendix D

### OCCUPATION SCHEDULE FOR: Bricklayer

**O\*NET-SOC CODE: 47-2021.00**  
**RAPIDS CODE: 0062**

This schedule is attached to and a part of these Standards for the above identified occupation.

**1. TERM OF APPRENTICESHIP**

The term of the occupation shall be **3 Years** with an OJL attainment of **6000 hours** supplemented by the required hours of related instruction.

**2. RATIO OF APPRENTICES TO JOURNEYWORKERS**

One (1) apprentice may be employed in each shop department, and/or jobsite employing (1) one qualified journeyworker.

**3. APPRENTICE WAGE SCHEDULE**

Apprentices shall be paid a progressively increasing schedule of wages based on a percentage of the current journeyworker wage rate.

**4 Year Term Example:**

1 <sup>st</sup>	1000 hours = <u>80%</u>	2 <sup>nd</sup>	1000 hours = <u>83%</u>
3 <sup>rd</sup>	1000 hours = <u>85%</u>	4 <sup>th</sup>	1000 hours = <u>88%</u>
5 <sup>th</sup>	1000 hours = <u>90%</u>	6 <sup>th</sup>	1000 hours = <u>93%</u>
7 <sup>th</sup>	1000 hours = <u>95%</u>	8 <sup>th</sup>	1000 hours = <u>97%</u>

Current Journeyworker wage rate is **\$25.18**

**4. SCHEDULE OF WORK EXPERIENCE (See attached Work Process Schedule)**

The Sponsor may modify the work processes to meet local needs prior to submitting these Standards to the appropriate Registration Agency for approval.

**5. SCHEDULE OF RELATED INSTRUCTION (See attached Related Instruction Outline)**

**WORK PROCESS SCHEDULE  
BRICKLAYER**

**DOT Code: 861-381.018**

**RAPIDS Code: 0052**

**Description:**

Lays building materials, such as brick, structural tile, and concrete cinder, glass, gypsum, and terra cotta block (except stone) to construct or repair walls, partitions, arches, sewers, and other structures: Measures distance from reference points and marks guidelines on working surface to lay out work. Spreads soft bed (layer) of mortar that serves as base and binder for block, using trowel. Applies mortar to end of block and positions block in mortar bed. Taps block with trowel to level, align, and embed in mortar, allowing specified thickness of joint. Removes excess mortar from face of block, using trowel. Finishes mortar between brick with pointing tool or trowel. Breaks bricks to fit spaces too small for whole brick, using edge of trowel or brick hammer. Determines vertical and horizontal alignment of courses, using plumb bob, gauge line (tightly stretched cord), and level. Fastens brick or terra cotta veneer to face of structures, with tie wires embedded in mortar between bricks, or in anchor holes in veneer brick. May weld metal parts to steel structural members.

**On-the-Job Training: APPROXIMATE HOURS**

**1. Laying of Bricks 3000**

- A. Mixing mortar, cement and patent mortar; bonding and trying
- B. Building footings and foundations
- C. Plain exterior brickwork (straight wall work, backing up brickwork)
- D. Building arches, groins, columns, piers, Corners
- E. Planning and building chimneys, fireplaces and flues, floors and stairs

**2. Laying of Stone 800**

- A. Cutting and setting of rubblework or stonework
- B. Setting of cut-stone trimmings
- C. Butting ashlar

**3. Pointing, Cleaning and Caulking 700**

- A. Pointing brick and stone, cutting and raking joints
- B. Cleaning stone, brick and tile (water, acid, sandblast)
- C. Caulking stone, brick and glass block

**4. Laying of Building Units 1000**

- A. Terra cotta and tile block cutting and setting
- B. Cutting, setting and pointing of cement blocks, artificial stone, glass blocks
- C. Blockarching

**5. Fireproofing 250**

- A. Building party walls (partition tile, gypsum blocks, glazed tile, terra cotta)
- B. Standardized firebrick
- C. Specialties

**6. Care and Use of Tools and Equipment** **250**

A. Trowels, brick hammer, plumb rule scaffolds, cutting saws and  
Welding equipment

**Total** **6000**

**RELATED INSTRUCTION  
BRICKLAYER**

**DOT Code: 861-381.018**

**RAIS Code:**

**0052**

**First Year**

**144**

Trade Arithmetic  
Care and Use of Tools and Equipment  
Blueprint Reading and Trade Sketching  
Symbols and Scale Representation  
Walls and Footings  
Pilasters, Columns, and Piers  
Chases and Recesses  
Principles of Correct Measurement  
Proper Mixing of all Mortars and Limes  
Safety Precautions  
Techniques of Spreading Mortar  
Job Layout  
Building Inside and Outside Corners  
Setting Sills and Copings  
Stone Masonry  
Estimating Reinforced Masonry Lintels  
Firebrick  
Acid Brick  
Glass Block  
Terra Cotta  
Concrete Footings  
Safety Precautions

**Second Year**

**144**

Trade Arithmetic  
Spreading Mortar  
Trade Sketching  
Estimating of Time and Materials  
Bonds  
Layout  
Caulking, Point and Cleaning  
Scaffolds

Laying Brick and Block to Line	
Refactories	
Firebox Construction	
Building Unit construction	
Specialties Work	
Fireproofing	
Safety Precautions	
<b>Third Year</b>	<b>144</b>
Trade Arithmetic	
Wall, Ties, Expansion Strips, and Clip Angles	
Flashing Materials	
Blueprint Reading	
Circles and Arcs	
Estimating	
Job Layout	
Insulating Materials for Masonry Walls	
Caulking, Pointing and Cleaning	
Elementary Architectural Drawing	
Layout of Story Poles	
Frames, Beams, Lintels, and Rods	
Cooperation and Leadership	
<b>TOTAL</b>	<b>432</b>