Appendix A

ON THE JOB LEARNING

AND

RELATED INSTRUCTION OUTLINE

DEVELOPED FOR

AUBURN UNIVERSITY FACILITIES MANAGEMENT

2023-AL-117052

Sponsor: Hayley White Date: 2/17/2025

Registration Agency: _____ Date: _____

☒Revised Appendix A, Occupation Registration Date: 1/9/2023

Appendix A

WORK PROCESS SCHEDULE
PLUMBER

O*NET-SOC CODE: 47-2152.00 RAPIDS CODE: 0432

☒ National Occupation ☐ State Occupation

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

1. APPRENTICESHIP APPROACH – V.8 29 CFR § 29.5(b)(2)

☒ Time-based ☐ Competency-based ☐ Hybrid

2. TERM OF APPRENTICESHIP – 29 CFR § 29.5(b)(2)

The term of the apprenticeship is 6000 hours, supplemented by 700 total hours of related instruction.

3. RATIO OF APPRENTICES TO JOURNEYWORKERS – 29 CFR § 29.5(b)(7)

Every apprenticeship program is required to provide a numeric ratio of apprentices to journeyworkers consistent with proper supervision, training, safety, and continuity of employment.

The apprentice to journeyworker ratio is: 1 apprentice(s) to 1 journeyworker(s).

Total number of journeyworkers employed: 2

4. APPRENTICE WAGE SCHEDULE – 29 CFR § 29.5(b)(5)

Apprentices shall be paid a progressively increasing schedule of wages based on either a percentage or a dollar amount of the journeyworker wage rate. The entry wage must not be less than the minimum wage prescribed by the Fair Labor Standards Act, where applicable, unless a higher wage is required by other applicable Federal law, State law, or respective regulations.

The journeyworker wage for this occupation is $18.00.

PERIOD	HOURS	WAGE RATE
1st	Starting wage – complete 2000 hours to move to period 2 wage	$15.00
2nd	Complete 4000 total hours to move to period 3 wage	$16.00
3rd	Complete 6000 total hours and all related instruction to move to end wage	$17.00
4th	End wage	$18.00

5. PROBATIONARY PERIOD – 29 CFR § 29.5(b)(8) and (20)

The probationary period may not exceed 25 percent of the length of the program or 1 year whichever is shorter. Full credit will be given for the probationary period toward the completion of the apprenticeship.

Every applicant selected for apprenticeship will serve a probationary period of 1500 hours.

6. SELECTION PROCEDURES – 29 CFR § 29.5(b)(10), (21) and 29 CFR § 30.10

SECTION I – MINIMUM QUALIFICATIONS

Applicants will meet the following minimum qualifications to be eligible for the pool of applicants:

A. Age

Applicants must not be less than 16 years of age and provide appropriate verification of age respecting Alabama state laws.

B. Education

Applicants must have a high school diploma, General Educational Development (GED) equivalency, or other high school equivalency credential. Applicant must provide an official transcript(s) for high school and any post–high school education.

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.

D. Other

Valid driver's license

SECTION II – SELECTION PROCEDURES

The sponsor has adopted the following selection procedures, consistent with the requirements set forth in forth in 29 CFR § 30.10(b):

A. Applications will be accepted as specified by the sponsor.

B. Every applicant will be required to complete an application that will be made available by the sponsor.

C. Completed applications will be checked for minimum qualifications. Applicants deficient in one or more qualifications or requirements or making false statements on their applications will be disqualified and no further processing of such application will be taken.

D. Applicants who meet the minimum qualifications will be entered into the pool of eligible applicants.

E. Applicants will have the opportunity to review the standards, the sponsor's written rules and policies, and the apprenticeship agreement during the application process and prior to joining the program.

F. Sponsor will conduct interviews and internal human resources procedures prior to an offer of employment.

SECTION III – DIRECT ENTRY

The sponsor who invokes a direct entry provision may do so without regard to the existing selection procedure or minimum qualifications used for entry into the apprenticeship program. Direct entry shall be done without regard to race, color, religion, national origin, sex (including pregnancy and gender identity), sexual orientation, genetic information, or an individual with a disability or a person 40 years old or older. The methods for direct entry are as follows:

A. A military veteran who has completed military technical training school and/or participated in a registered apprenticeship program or related occupation while in the military in the occupation registered. 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. The sponsor will evaluate the training received to grant appropriate credit.

B. An individual who has completed an AOA certified pre-apprenticeship training program and meets the minimum qualifications of the apprenticeship program. may be admitted directly into the program. The applicant shall provide official

documentation confirming that they fulfilled the specific requirements of the pre-apprenticeship program, such as skills assessments, completion/graduation certificates, and transcripts. The sponsor will evaluate the pre-apprenticeship training received to grant appropriate credit.

C. Individual who is a current employee. The sponsor will evaluate the current employee's skills to grant appropriate credit.

ON-THE-JOB LEARNING OUTLINE
PLUMBER

O*NET-SOC CODE: 47-2152.00 RAPIDS CODE: 0432

On-the-Job Learning Guidelines:

- During the apprenticeship, the apprentice shall receive work experience and job-related education in all phases of the occupation, including safe work practices, necessary to develop the skill and proficiency of a skilled professional.
- The program sponsor must ensure apprentices are rotated throughout the various job functions to ensure a well-rounded professional upon completion of the apprenticeship and identify what methodology will be used to track progression of experience on-the-job.
- The on-the-job learning outline does not need to be followed in any particular sequence. In all cases, the apprentice is to receive sufficient experience to make them fully competent in all job functions.
- Such on-the-job learning shall be carried on under the direction and guidance of a qualified professional.

JOB FUNCTION	HOURS
JOB FUNCTION 1: Safety	**300**
1. Demonstrate good safety practices	
2. Demonstrate proper techniques for lifting and carrying	
3. Exercise extreme caution when working around electric lines and equipment	
4. Maintain work area properly	
5. Adhere to safety signs	
6. Identify and report potential safety hazards	
7. Practice ladder and scaffold safety	
8. Safely operate hand and power tools	
9. Properly handle gas cylinders, hoses, and regulators	
10. Wear required safety equipment	
11. Identify types of fire extinguishers and their proper uses	

12. Practice fire safety when operating heating equipment or working with hot materials	
13. Demonstrate safe practices when using flux	
14. Demonstrate safe use of chemicals	
15. Read and interpret MSDS sheets	
16. Demonstrate an awareness of locating and verifying buried utility lines	
17. Shoring and bracing excavation	
18. Demonstrate awareness of confined space	
19. Identify hazardous materials on site (i.e. leaking gas, asbestos)	
20. Demonstrate awareness of OSHA guidelines	
JOB FUNCTION 2: Basic Skills	**800**
1. Demonstrates basic reading skills	
2. Use good time management skills (i.e., efficient use of time on job site)	
3. Lay out and plan any given plumbing installation	
4. Define plumbing terminology	
5. Read measuring devices	
6. Read and interpret drawings	
7. Sketch a plumbing layout	
8. Read and interpret catalog and rough-in information	
9. Read and interpret specifications	
10. Prepare a bill of materials	
11. Read and interpret applicable codes	
12. Identify basic structural framing components	
13. Use judgment for structural penetrations (i.e., drilling, cutting, notching)	
14. Solder joints	
15. Assemble a soft and rigid lead-free copper joint	
16. Assemble a plastic joint/connection	

17. Perform general mathematical calculations	
18. Read and interpret Americans with Disabilities Act (ADA) requirements	
JOB FUNCTION 3: Basic Use of Hand and Power Tools	**900**
1. Identify types of pipe cutters	
2. Cut cast-iron pipe	
3. Cut plastic pipe	
4. Cut copper pipe	
5. Cut clay pipe	
6. Operate pipe threader – all types	
7. Assemble fittings using two pipe wrenches	
8. Operate hand and power tools	
9. Operate a fuel-air torch	
10. Operate plastic fusion equipment	
11. Basic operation of electrical testing equipment	
12. Operate sewer camera	
JOB FUNCTION 4: Waste and Vent Systems	**1500**
1. Construct/Repair a cast-iron assembly with compression gasket joints	
2. Construct/Repair a no-hub cast-iron pipe assembly	
3. Install a piping adapter to couple different pipe materials	
4. Excavate a trench and maintain desired grade	
5. Install/Repair a floor drain	
6. Rough-in for a sink	
7. Rough-in for a washing machine	
8. Rough-in for indirect waste	
9. Install backwater valve	
10. Understand a standing water test	
11. Understand an air test to manufacture's specifications	

12. Install/Repair a sump pump	
13. Install/Repair a subsoil drainage system	
14. Utilize methods to clear line blockages (jet truck, cable, etc.)	
15. Install/Repair chemical waste lines	
16. Utilize troubleshooting methods for common waste issues	
JOB FUNCTION 5: Pressure Piping	**1500**
1. Install a building's water service	
2. Install a main shut-off valve	
3. Assemble soft tubing joints	
4. Install, troubleshoot, maintain, and repair a water distribution system	
5. Rough-in water supply for various applications	
6. Install a sillcock	
7. Install a water hammer arrestor	
8. Understand an air pressure test	
9. Install a pressure reducing valve	
10. Perform a water pressure test	
11. Install a check valve	
12. Install a vacuum breaker	
13. Utilize troubleshooting methods for common water distribution issues	
14. Install, troubleshoot, maintain, and repair vacuum systems	
15. Install, troubleshoot, maintain, and repair compressed air systems	
16. Install, troubleshoot, maintain, and repair gas systems	
17. Install, troubleshoot, maintain, and repair specialty water systems (RO, DI)	
18. Install/Repair backflow preventer	
JOB FUNCTION 6: Fixtures and Trim	**1000**
1. Identify components of fixture hardware	
2. Install a lavatory	

3. Trim out a lavatory	
4. Install a sink	
5. Trim out a sink	
6. Connect a dishwasher	
7. Install a gas water heater	
8. Install an electric water heater	
9. Install shut-off valves	
10. Install a water softener	
11. Install an emergency wash system	
Total	**6000**

RELATED INSTRUCTION OUTLINE
PLUMBER

O*NET-SOC CODE: 47-2152.00 RAPIDS CODE: 0432

Related Instruction Guidelines:

- The course listings outline the related instruction that supplements the on-the-job learning. It is through the combination of both the on-the-job learning and the related instruction that the apprentice can reach the skilled level of the occupation.
- Each apprentice's attendance and progress in related education must be tracked and appropriate records maintained.
- Time devoted to the job-related education shall not be considered as part of the on-the-job learning.
- Failure on the part of the apprentice to fulfill their obligation as to the related education and/or attendance, or their failure to maintain passing grades therein, shall constitute adequate cause for cancellation of their Apprenticeship Agreement.

Hours Instruction Provided: ☒During Work Hours ☐During Non-Work Hours ☐Both
Instruction Method: ☒Classroom ☐Correspondence/Shop ☐Web-Based Learning
Apprentices will be paid for hours spent attending related instruction classes.

RTI Provider Name: Auburn University Facilities Management
Contact Name: Dan Whatley
Contact Phone: 334-844-7411
Contact Email: wdw0013@auburn.edu
Contact Address: 1161 W Samford Avenue, Auburn, AL 36849

National Center for Construction Education and Research (NCCER) Credentials
NCCER CORE
NCCER PLUMBER LEVEL 1
NCCER PLUMBER LEVEL 2
NCCER PLUMBER LEVEL 3
NCCER PLUMBER LEVEL 4

NCCER COURSE	TITLE	HOURS
Core: Introduction to Basic Construction		
Module ID 00100	Build Your Future in Construction	2.5
Module ID 00101	Basic Safety (Construction Site Safety Orientation)	12.5
Module ID 00102	Introduction to Construction Math	10
Module ID 00103	Introduction to Hand Tools	12.5
Module ID 00104	Introduction to Power Tools	10
Module ID 00105	Introduction to Construction Drawings	10
Module ID 00106	Introduction to Basic Rigging	7.5
Module ID 00107	Basic Communication Skills	7.5
Module ID 00108	Basic Employability Skills	7.5
Module ID 00109	Introduction to Materials Handling	5
Plumber Level 1		
Module ID 02101	Introduction to the Plumbing Profession	5
Module ID 02102	Plumbing Safety	22.5
Module ID 02103	Tools of the Plumbing Trad	10
Module ID 02104	Introduction to Plumbing Math	12.5
Module ID 02105	Introduction to Plumbing Drawings	17.5
Module ID 02106	Plastic Pipe and Fittings	12.5
Module ID 02107	Copper Tube and Fittings	12.5
Module ID 02108	Cast-Iron Pipe and Fittings	12.5
Module ID 02109	Steel Pipe and Fittings	12.5
Module ID 02110	Introduction to Plumbing Fixtures	7.5
Module ID 02111	Introduction to Drain, Waste, and Vent (DWV) Systems	10
Module ID 02112	Introduction to Water Distribution Systems	10
Plumber Level 2		
Module ID 02201-13	Plumbing Math Two	15
Module ID 02202-13	Reading Commercial Drawings	25
Module ID 02203-13	Structural Penetrations, Insulation, and Fire-Stopping	15
Module ID 02204-13	Installing and Testing DWV Piping	30

Module ID 02205-13	Installing Roof, Floor, and Area Drains	5
Module ID 02206-13	Installing and Testing Water Supply Piping	20
Module ID 02207-13	Types of Valves	5
Module ID 02208-13	Installing Fixtures and Valves	20
Module ID 02209-13	Installing Water Heaters (	10
Module ID 02210-13	Basic Electricity	10
Module ID 02211-13	Fuel Gas and Fuel Oil Systems	20
Plumber Level 3		
Module ID 02301-14	Applied Math	17.5
Module ID 02312-14	Sizing and Protecting the Water Supply System	30
Module ID 02303-14	Potable Water Supply Treatment	15
Module ID 02305-14	Types of Venting	20
Module ID 02306-14	Sizing DWV and Storm Systems	20
Module ID 02307-14	Sewage Pumps and Sump Pumps	12.5
Module ID 02308-14	Corrosive-Resistant Waste Piping	7.5
Module ID 02309-14	Compressed Air	10
Module ID 02311-14	Service Plumbing	27.5
Plumber Level 4		
Module ID 02401-14	Business Principles for Plumbers	5
Module ID 46101-11	Fundamentals of Crew Leadership	20
Module ID 02403-14	Water Pressure Booster and Recirculation Systems	12.5
Module ID 02404-14	Indirect and Special Waste	17.5
Module ID 02405-14	Hydronic and Solar Heating Systems	17.5
Module ID 02406-14	Codes	12.5
Module ID 02408-14	Private Water Supply Well Systems	10
Module ID 02409-14	Private Waste-Disposal Systems	10
Module ID 02410-14	Swimming Pools and Hot Tubs	7.5
Module ID 02411-14	Plumbing for Mobile Homes and Travel Trailer Parks	7.5
Module ID 02412-14	Introduction to Medical Gas and Vacuum Systems	15
	TOTAL	**700**