LANG MASONRY
& RESTORATION CONTRACTORS

MCAA Grant

Project Title: 12 Week Intensive - Masonry Training

About Lang Masonry Contractors

Lang Masonry Contractors, Inc., a growing masonry contracting business in Ohio, began over 30 years ago with entrepreneur Damian Lang.

Through high productivity standards and the dedication of the employees, the business has grown into one of the best mason contracting businesses in the nation. Focusing now on commercial and industrial projects, Lang Masonry Contractors, Inc. continues to concentrate on the basics that got them where they are – Safety, Quality, and Production.

The company believes in providing the best training, tools, and equipment to workers to effectively maintain each of these aspects on the job site.

Progressive pay programs and competitive bidding are an integral part of the company's success; however, the relentless pursuit of safety, quality, and production on each job is the driving force behind every decision made in daily operations. Lang Masonry Contractors, Inc. remains committed to providing the highest integrity service to the commercial, industrial, and institutional masonry customer.

Project Description

Lang Masonry & Restoration Contractors is partnering with Buckeye Hills Career Center to deliver a 12 week Masonry Training Program.

Lang Masonry will ensure that the strategy and activities for the grant partnership will be led by the collective voice of the employer-educator base through regular meetings and evaluation of participant progress.

The sector focus is construction with an emphasis on the Masonry industry. Sector growth in the Masonry industry is being hindered due to the lack of skilled labor, particularly in the commercial Masonry field. While the focus is on masonry, the construction industry itself is affected by the lack of skilled workers. Most often the certified Masonry student having completed their program are still in need of specific commercial masonry skills to be productive and efficient in the industry.

There are currently no formed sector partnerships, to our knowledge, in our region of the State of Ohio. As a business, focused on continued growth, we have completed our due diligence and understand the benefits of this program to our region and state, as well as to our industry. In creating an industry partnership, we will allow Ohioans and those surrounding areas to compete for quality, in demand jobs, with the necessary training required to be skilled workers. It will build pathways with seamless transitions from one educational steppingstone to another. This will maximize our resources and create a pipeline of future workers.

The partnership will lead the development of additional sector partners and programs within the masonry and restoration work needed for the southeastern Ohio region and surrounding counties. This model will not only propel the skill building of masonry workers but can be adapted to other industry occupations.

The partners will continue to work with all career tech centers (Joint Vocational School Districts and Ohio Technical Centers (Adult Education Centers)) across SE Ohio to develop a pipeline of commercial workforce needed for masonry and restoration work. The partnership aligns perfectly with existing Masonry programs and allows participants to broaden their opportunities.

At this point and for the unforeseeable future, the partnership companies do not base projections on labor availability. We subcontract the labor shortage. Lang Masonry has exhausted all resources for labor pull. We are creating, through this program, the pipeline that is needed to continue our growth.

Project Objectives

Two of the largest barriers for employment in our region are the lack of a skilled workforce and a lack of transportation.

This partnership strives to eliminate those barriers by providing high quality instruction in the areas of masonry, brick and block laying. Participants will come out of this program highly qualified to attain high-paying in-demand jobs that can lead to life-long careers. Participants who successfully complete the program will have an immediate opportunity of employment which includes a high pay rate, sign on bonuses, a full benefits package and pension, and a 401K

Participants who successfully complete the program will also have the opportunity to receive generous per-diem regularly in order to offset the transportation costs.

Scope and Deliverables

All students enrolled in the Masonry and Restoration program will be provided the opportunity to obtain the following credentials along with the specialized masonry training:

NCCER Core
NCCER Level 1 Masonry (customized component as well)
OSHA 10
First Aid and CPR

Deliverable 1:

Students will be engaged in both classroom discussion and hands-on instruction in order to **learn the masonry and restoration skills to lay block and brick**.

WEEK 1: During the first week of the program, students learn about tools, materials, and equipment while completing the NCCER Core Curriculum (Masonry). Instruction will cover basic safety, communication skills, and an introduction to construction drawing. Students will learn to mix mortar, build a hop scaffold, stock materials and spread mortar.

WEEK 2: During the second week of the program, students will participate in hands-on activities learning to lay block and brick to the line.

Week 3: In week three, the students will hone the skills learned in week two in addition to learning to lay a corner.

WEEK 4: Week four focuses on laying bond, square feet, wire, insulation, flashing, rebar, grout, reading each brick rule, types of brick patterns, and cavity wall construction.

WEEK 5: At the end of week five, students will take a written assessment over all previously covered material. Based on attendance, the skill level of the instructor, and student participation, dedication, and attendance in hands-on activities, 100% of the students are expected to pass the written assessment.

WEEK 6 and 7: During weeks six and seven, 100% of students are expected to successfully complete the OSHA 10 training in addition to installing flashing, insulation, drip edges, and weeps.

Deliverable 2:

During the **delivery period**, students will be engaged in both classroom discussion and hands-on instruction in order to complete the **NCCER level 1 curriculum**.

WEEK 1: During the first week of instruction, students will learn about basic masonry material, tools, techniques, and safety precautions. Students will learn how to mix mortar by hand and lay masonry units; and learn the skills attitudes, and abilities of successful masons.

WEEK 2: During week two, students learn to identify the common causes of accidents and the hazards associated with masonry tools, equipment, mortar, and concrete. Students will learn about personal protective equipment, working safely from elevated surfaces, properly using masonry tools and equipment, and handling masonry material safely.

WEEK 3: The third week of instruction included discussion and hands-on training about a variety of hand tools, measuring tools, mortar equipment, power tools and equipment, and lifting equipment that masons use on the job. Instruction includes explanations of how to use these tools correctly and safety. At the end of the third week, 100% of students will know how to handle tools and equipment safely.

WEEK 4: Week four focuses on the calculations of distances and areas common in masonry work, describes the information found on residential construction drawings, and explains the role of specifications, standards, and codes.

WEEK 5: During the fifth week, students will learn the types and properties of mortar and the materials used in the mixture, including admixtures. Students will learn how to properly mix mortar by machine and how to properly apply and store mortar.

Deliverable 3:

Students will be engaged in both classroom discussion and hands-on activities as students earn the **First Aid/CPR Certification** and are placed into the workforce for further development.

During the instructional period, students will learn about bleeding and bandaging, heart-related illnesses, diabetes and low blood sugar, fainting, seizures, allergic reactions and breathing, concussions, head, neck, and spine injuries, drug overdoses and alcohol poisoning, risks of smoking and vaping, and the benefits of a successful lifestyle.

After successfully completing the First Aid/CPR Certification, 100% of students will have the opportunity to be job placed in the masonry field with Lang Masonry.

All credential components will be scored as recommended in the guidelines of the given program and pass requirements. The hands-on training will be evaluated and scored based on technique and ability to master established levels.

Participant results to present:

Two sessions have been run with the following results:
First class: 4 students successfully completed the course. Credentials: NCCER CORE, and OSHA 30
2 Students employed in Construction, Carpentry
1 Continuing Education is a Health Care Field
1 Continued employment at McDonalds with promotion to Assist Manager

Second class: 11 students successfully completed the course. Credentials: NCCER CORE, and OSHA 30
6 were hired by LMC
1 continuing education at Buckeye Hills
1 working and pizza shop and trying to get in heavy equipment apprenticeship
1 employed landscaping and lawn care
1 employed as property grounds maintenance at a housing authority
Other 1 are unknown employment status.

Funding:
Request is being made to cover the cost of training expenses for LMC, supplies, and equipment. See attached budget.

per semester. We will offer 2 semester per year. So, the hours will be times 2.

Training	Total Hours	Instructor BHCC	Instructor Lang
Hands On Training	188		188
NCCR CORE	72.5	72.5	
Level I	112.5	56.25	56.25
OSHA 10	10	10	
FIRST Aid and CPR	8	8	
Planning Time	80	40	40
	471	186.75	244.25

	BHCC Estimated Cost	LMC Cost
Spring 2021 Session	$ 31,400.00	$ 13,433.75
Fall 2021 Session	$ 31,400.00	$ 13,433.75
Supplies		$ 2,184.00
Equipment		$ 13,050.14
	$ 62,800.00	**$ 42,101.64**

Mason Class Outline

Week 1

Introduction to equipment

Mixer, Trowel, Mortar board,Line blocks, twigs, line pins, etc.

Learn how to use a Trowel/Spreading Mortar

Vocabulary

Introduce brick

Begin to lay brick

Tooling joints - The process, when to tool and the different types of joints

Week 2

OSHA WEEK

Week 3

Laying brick

Learn bond and hitting heights on 8"

Week 4

Continue laying brick

Introduce block

Week 5

Continue laying Block and Brick

Control joint

Laying to the line

Week 6

Continue laying Block and Brick

Control joint

Laying to the line

Week 7 ***Speed Week***

Monday - Brick Only 2 hours

Tuesday - Block only 2 hours

Wed. - Block and brick 2 hours

Thursday - Block and Brick 2 hours

Friday - Own design 2 hours

Week 8

Work on everything learned during Speed Week

Week 9

Introduce cavity wall construction

Flashing, weeps, Mortar Net, Termination bar, Drip edge, etc.

Week 10

Laying block with wire

Install flashing with Termination bar

Lay brick and install weeps and mortar net

Week 11

Monday - 8" block Speed challenge full class

Tuesday - free practice

Start Project - Graded when finished

Week 12

Monday Design build - graded

Tuesday - 8" block speed challenge with prizes to winner!!

TBD


CORRAL
CERTIFICATE of ACHIEVEMENT
Trent Cobb
CERTIFICATE of ACHIEVEMENT
Dalton Perry
CERTIFICATE of ACHIEVEMENT
Terry Ellis
CERTIFICATE of ACHIEVEMENT
Travis Spurlock
BUCKEYE HILLS CAREER CENTER