

**SOP Number #SWD- 009**

**SOP Title Excavation for Pillars and Piers**

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<b>009</b>			

## 1. PURPOSE

- This procedure is a guideline on the proper way to excavate for the construction of pillar and piers to support piping, electrical, and other foundational supports. Employees at BBGCI will use this as a guide to help them perform their duty in a safe and productive manner.
- BBGCI will be in compliance with all government regulations as well as the regulations set forth by our clients.

## 2. INTRODUCTION

- BBGCI understands that all jobs are different. This SOP is set in place as a guideline to help employees understand the proper procedure to follow while excavating for construction pillar and pier supports at a facility.

## 3. SCOPE

- This procedure has been set in place for BBGCI personnel who will be performing operations for excavating pillar and pier supports for facility construction.

## 4. DEFINITIONS

- Layout – Use marking paint, string and nails to create ground marks for facility equipment and piping
- One Call - a system through which a person can notify owners/operators of lines or facilities of proposed excavations.
- Line Locate – to determine existence of underground utilities.
- Plot Plan – diagram which shows facility equipment and piping designed location.
- Line of Fire- The path of a moving object that can potentially injure or the potential path of an object that may move
- Buffer Zone- The area where operation occurs that is deemed not safe for unauthorized personnel or equipment.

## 5. RESPONSIBILITIES

### BBGCI Personnel

1. Participate in tailgate meeting and JSEA.
2. Understand the scope of work prior to beginning task.
3. Maintain good communication with all employees involved in this process.
4. Properly inspect all tools before use.
5. Make sure One Call (along with BBGCI line locater/ *green stick* to verify twice) is valid and all utility owners have given “all clear” responses
6. Understand Line Locate Map and Plot Plan
7. Survey and mark location for excavation
8. Spot Third party digger as needed.

9. Verify Excavation is proper size and dept per client specification.
10. Remove Excess dirt to neutral location
11. Cover and clearly mark open holes to prevent falls.

Qualified Spotter

- Attend/ participate in tailgate meeting and JSEA.
- Establish good communication with all supporting personnel involved with drilling operation from Third party company.
- Guide vessel/trucks to desired location and assist in guide to survey marker for drilling and digging to begin.
- Keep unauthorized personnel away from the work area at all times.
- Monitor for any unexpected hazards that could potentially endanger employees.

Note : If specified must wear reflective vest

**6. SPECIFIC PROCEDURE**

Excavation for Pillars and Piers

*(Personnel Involved: BBGCI Personnel)*

1. Before work can commence a onecall must be made with an all clear from all participating utilities.
2. Properly complete all JSEA's, work permits if applicable from client for ground disturbance, and perform a safety tailgate meeting.
3. Establish the scope of work, and ensure everyone knows their specific job duty.
4. Properly inspect all tools to be used.
5. Using predetermined points from the site layout and client's plot plans, competent employee then marks locations with survey mark where drilling is to be done.
6. Establish buffer zones and keep them clear while holes are being drilled.
7. Third party will drill out the holes from pre-marked area to the client's specified width/diameter and depth
8. Excess dirt should be moved to a neutral location.
9. Open holes should be covered and properly marked

**7. JOB RELATED HAZARDS**

***Slips, Trips and Fall Hazards:***

- Working and walking on uneven surfaces or rocks
- Nails and string line and rebar

- Falls to a lower level

***Wildlife***

***Heat Stress***

***Impalement***

***Pinch Points and Line of Fire Hazards:***

- Using hand tools
- Unidentified underground utilities
- Moving equipment

**8. REQUIRED PPE**

- Hard hat
- Safety Glasses
- Steel Toe Boots/ Safety Toe Shoes
- Gloves
- Reflective vest (If Specified)
- Fire Resistant Clothing (Site Specific)
- Personal Gas Monitors (Site Specific)

**9. FORMS/TEMPLATES TO BE USED**

- JSEA
- Work Permits (If Required)
- Ground disturbance Permits (If Required)
- Client Required Forms

**10. INTERNAL AND EXTERNAL REFERENCES**

**10.1 Internal References**

**10.2 External References**

**11. CHANGE HISTORY**