

**SOP Number #SWD- 010**

**SOP Title Constructing Forms and Pouring Concrete**

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## 1. PURPOSE

- This procedure is a guideline on the proper way of constructing forms and pour concrete. 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 constructing forms and pour concrete at a SWD 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

- Concrete – a composite material composed of coarse aggregate bonded together with a fluid cement that hardens over time.
- Rebar - a steel bar or mesh of steel wires formed and used as a tension device in reinforcing concrete.
- Galvanized Mesh – steel wires or expanded metal can be formed and used as a tension device in reinforcing concrete.
- Forms – Premade or built on site structures of wood or other material to pour concrete in.
- 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. Follow safety policies and procedures as outlined in **Concrete and Wood Work Safety** Policy Section #13
6. Spotters shall guide Third party Concrete truck as needed.
7. Verify rebar and forms are tailored to client's specification.

8. Assist concrete companies by directing the pour into the premade or constructed forms.
9. Work and finish concrete to client specifications (Vibrate and smooth)
10. Set anchor bolts for securing structures per client specification.

*Note: Client may require Third party lab to take samples and test concrete mixture during pouring operation at a set yardage interval.*

#### 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 pouring of concrete.
- Also guide backhoe, track hoe, or forklift if needed.
- 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

### Pouring Concrete in Predrilled Hole

*(Personnel Involved: BBGCI Personnel)*

1. Properly complete all JSEA's, work permits if applicable from client for ground disturbance, and perform a safety tailgate meeting.
2. Establish the scope of work, and ensure everyone knows their specific job duty.
3. Properly inspect all tools to be used.
4. Take rebar and/or steel mesh to bend, cut, or form the internal structures for tension support of concrete. Or build wooden structure to pour concrete in.
5. After supports are constructed use appropriate mechanical lifting device to transport and install in predrilled hole or other forms. (Refer to Forklift or Skid Steer Operation SOP)
6. Spotter can guide the cement truck to the desired location of the pour.
7. With the assistance of the support personnel guide the cement chute as the cement truck pours concrete into the forms.
8. Support personnel can then begin finishing the concrete using power and hand tools.
9. After appropriate cure time, per client specifications and or industry standards, forms can be removed

## 7. JOB RELATED HAZARDS

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

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

### **Crushed by/Struck by concrete truck**

### **High noise environment**

### **Hand abrasions/cuts**

- Tie rebar for concrete forms
- Struck by (hammer , cut offs, ect)

### **Eye Irritant**

- Chemical
- Flying Debris

### **Muscle strains**

### ***Wildlife***

### ***Heat Stress***

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

- Using hand and power tools/ electric generator
- Cuts and scratches from cutting and forming rebar and steel mesh
- Moving equipment

## 8. REQUIRED PPE

- Hard hat
- Safety Glasses
- Steel Toe Boots/ Safety Toe Shoes
- Appropriate 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**

*Concrete and Wood Work Safety SOP Section #13*

**10.2 External References**

**11. CHANGE HISTORY**