

PURPOSE:

To identify safe work practices and to address the rigging needs for rebar cages and center bars.

EXCLUSIONS: This best practice does not apply to the installation of drilled shafts.

PLANNING:

In preparation of the job scope, thought should be dedicated to the handling and rigging of rebar cages and center bars.

- Pre-con meetings and JHA's shall address the procedures of handling and rigging of rebar cages and center bars.
- Develop and communicate the Pre-task plan thoroughly with everyone involved in the task.
- Determine the safest method and travel path to handle or install the rebar cage or center bar.
- Select the proper equipment (cranes, multi-pilers, excavators, forklifts, etc.) in order to handle or install rebar cages and center bars.
- Develop a lift plan to ensure that equipment has the capacity to handle the weights of the material at all stages in the process.

EXECUTION – Relocation of Rebar Cages and Center Bars:

As a means to reduce risk on drilled piling projects, Cajun shall perform the relocation of rebar cages and center bars by lifting them in a horizontal position in a manner adequate to avoid damage.

When relocating rebar cages or center bars, either of the following preferred methods shall be used:

Method 1. When relocating with a crane, an adequate rigging configuration shall be used to lift and move the rebar cage or center bar in a horizontal position.

Method 2. When relocating with an excavator, rigging shall be attached to safely drag the rebar cage or center bar to the designated area.



Method 3. When relocating using heavy equipment with forks, rebar cages and center bars shall be centered horizontally on the forks.



Note: If a rebar cage or center bar must be lifted in the vertical position, for reasons other than installation, then a detailed plan must be approved by the Construction Manager and the Manager of Safety.

EXECUTION – Installation of Rebar Cages:

- Inspect each rebar cage for the proper securement of horizontal bands to vertical bars.
- Inspect all rigging utilized for the lift. (Use either endless slings, 2-ply nylon slings, or 3/8” wire rope slings to attach to the rebar cage.)
- Ensure that the hitches in the rigging configuration are not applied above the second horizontal band from the top of the rebar cage.
- Choke the sling around one vertical bar and horizontal band simultaneously.
- Move up either one or two bands above the one that is currently hooked. Make a half hitch around that horizontal band and the same vertical bar with the sling.
- Repeat this installation 180° from the first sling, on the same end of the cage.



- Hook the slings to the intended lifting point and lift the rebar cage over the pile location. Utilize a tag line on the bottom of the cage to minimize load swing, if necessary.



- Remove the tag line, lower the cage in the pile to the proper elevation, secure the cage, and remove the rigging.

EXECUTION – Installation of Center Bars:

- Inspect rigging all rigging utilized for the lift. (Use only an endless sling or 2-ply nylon sling, that is 10' or greater in length, to attach to the center bar.)
- Prior to rigging to the center bar, the following two practices must be performed.
 1. The area where rigging will be applied to the center bar shall be cleaned (remove any mud, clay, sand, etc.)
 2. A high visibility line must be painted at 5 feet and 6 feet from the top of the center bar. (The painted lines will serve as an indicator for the correct placement of rigging for the rigger and others.)



- At approximately 6 feet from the top of the center bar choke the rigging around the bar.
- Extend the rigging approximately 1 foot (above the choker hitch) and make a half-hitch around the center bar.
- Once the rigging is attached, cinch the rigging at each choke or half-hitch on the center bar to assure a tight connection and ensure there is no slack between connection points. (Ensure that each hitch in the rigging configuration is attached slightly below the designated painted lines.)



- Attach the rigging to the equipment’s intended lifting point and verify that the rigging is configured accordingly before conducting the lift. (The sling shall be long enough so that the lifting point is above the top of the center bar when lifted.)
- Lift the center bar over the pile location. Utilize a tag line on the bottom of the center bar to minimize load swing, if necessary.
- When lifting the center bar vertically, the bottom of the center bar shall not exceed 4 foot from the lowest surface elevation. This will help reduce the risk of a dropped load.
- Remove the tag line, lower the center bar in the pile to the proper elevation, secure the center bar, and remove the rigging.

First Level Review		
<i>Role</i>	<i>Signature</i>	<i>Date</i>
CM – Drilled Piling	<i>[Signature]</i>	2/10/2020
CM – Driven Piling	<i>[Signature]</i>	2-10-2020

Approvals		
<i>Role</i>	<i>Signature</i>	<i>Date</i>
Business Unit Leader – DF	<i>[Signature]</i>	02.10.2020
Director of Construction – DF	<i>[Signature]</i>	2/10/2020
Manager of Safety – DF	<i>[Signature]</i>	2/10/2020

Requirement: Work must be performed in accordance with the information in this Best Practice. If it is determined that work cannot be done as required in the Best Practice or that it presents additional risk, you must obtain authorization for variance from the Construction Manager and the Manager of Safety.

DOCUMENT ACKNOWLEDGEMENT FORM

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Date: (please print neatly)	<i>By signing, I acknowledge the information in this document and agree to work in accordance with it</i>
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