

Oklahoma Department of Transportation

Drilled Shafts-Permanent Casing(C.G.S.P. for Double Casing Method)
Construction Control Directive No. **19970709**

February 15, 2002

Scope: To identify changes to the construction methods for the installation of drilled shafts.

The method of payment for permanent inner casing (CGSP casing) in drilled shafts using the Double Casing Method has changed from the 1988 Standard Specification to the 1996 Metric Standard Specification. Under the 1996 Metric Specification, CGSP casing is not a pay item.

The use of CGSP casing and the Double Casing Method has not changed. Under either specification, the contractor typically has the option to use the Double Casing Method to facilitate construction of drilled shafts. If plan notes specify the Double Casing Method, CGSP casing must be used. If plan notes prohibit the Double Casing Method, CGSP casing cannot be used. Permanent casing cannot be used when the drilled shaft relies upon skin friction to carry the load. Permanent casing interferes with the development of the skin friction between the drilled shaft and surrounding soil. When permanent casing is used, it should never extend to the bottom of the shaft.

Where casing is not required and not prohibited, the contractor may elect to use casing to facilitate his operations at his own expense. If there are not plan notes, many methods of excavation may be acceptable depending upon the soil conditions; look in the Standard Specifications.

Depending on which specification controls, edition, 1988 vs. 1996, and the plan notes, the payment method for CGSP casing varies. The following table details the differences:

Plan Note Requirements	1988 Spec		1996 Spec	
	Install CGSP?	Separate Pay Item?	Install CGSP?	Separate Pay Item?
• No Special Notes	Contractor's Option	YES	Contractor's Option	NO

Plan Note Requirements	1988 Spec		1996 Spec	
	Install CGSP?	Separate Pay Item?	Install CGSP?	Separate Pay Item?
<ul style="list-style-type: none"> • Double Casing Method required; • Cost of CGSP included in other items. 	YES	NO	YES	NO "Cost" plan note is not needed; it is covered by the Specification
<ul style="list-style-type: none"> • Double Casing Method required; • CGSP Pay Item included in the summary. 	YES	YES	NOT APPLICABLE The Bridge Division will not specify a CGSP pay item under the 1996 Standard Specification.	
<ul style="list-style-type: none"> • Double Casing Method Prohibited 	NO	NO	NO	NO

If you think the double casing method should be specifically included or excluded on your project, be sure to inform the bridge project engineer and/or consultant well before the letting, preferably at the Plan-in-hand meeting.

If you find a category not mentioned above, contact the Construction Division or the Bridge Division before taking action.

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