

Diary Number: \_\_\_\_\_

Inspector Name: \_\_\_\_\_

TRACS Number: \_\_\_\_\_

Date: \_\_\_\_\_

**Division VI: Structures**

**Title: Drilled Shaft Placement (Dry Excavation)**

Structure Number
Structure Name
Station
Shaft Number
Abutment 1 or 2
Pier Number

Attribute Numbers	Compliance	Narratives	References
0.		All stakeholders have participated in the pre-activity meeting (can be combined with other pre-activity).	Construction Manual 601-3.03 (B) Standard Specifications 609-1.03
1.		The mix design has been submitted and reviewed by the Resident Engineer and approved by the Regional Materials Engineer.	Materials Practice and Procedure Directives 15a
2.		Certificates of compliance conforming to the requirements of Standard Specification Sub-Section 106.05 are on file for liquid-membrane forming (curing) compound (when used), whether pre-approved with a green sticker or not.	Materials Practice and Procedure Directives 3a
3.		A detailed installation plan has been submitted, reviewed, and approved prior to the start of work. Plan should be reviewed by Geotech Engineer of record and copied to Geotech Services.	Standard Specifications 609-1.03
4.		The contractor safety plan has been reviewed and approved by the engineer and is being followed. The plan shall satisfy occupational safety guidelines in all construction activities involved in the project. For additional information, refer to ADOT Standard Specification 107.08.	OSHA 29 CFR 1910 OSHA 29 CFR 1926 Standard Specifications 107.08

5.		The Certificates of Compliance to which state that steel or iron products incorporated into the project meet the Buy America Act requirements', certifying that all manufacturing processes producing a steel or iron product, including any application of a coating to iron or steel, occurred in the United States.	23 CFR Part 635.410 Special Provisions 106.15 Special Provisions 106.05
6.		Adequate survey offset points have been set to allow for checking of the center axis of the hole and rebar cage locations.	Standard Specifications 609-3.03 Standard Specifications 925-3
7.		The confirmation shaft was constructed to verify the contractor's means and methods to proceed.	Standard Specifications 609-3.02
8.		When caving conditions are encountered, drilling is suspended; construction methods are revised and approved by the Engineer.	Standard Specifications 609-3.02 Standard Specifications 609-3.03
9.		All slurry, water and contaminated concrete are contained as provided for in the approved project SWPPP.	Erosion and Pollution Control Manual NS-3 Special Provision 104.09
10.		The maximum variation from the drilled shaft axis is checked and documented on each shaft (maximum allowed is 5% of the shaft diameter, not to exceed three inches from the plans location).	Standard Specifications 609-3.03
11.		The contractor is checking and verifying compliance of all plumbness checks for each shaft and submitting the results to the Engineer (maximum deviation = 1-1/2%).	Standard Specifications 609-3.03
12.		When casing is required, the inside diameter is not less than the specified drill shaft size.	Standard Specifications 609-2.03 Standard Specifications 609-3.03
13.		When steel casing is used, it conforms to the requirements of AASHTO M270 (ASTM A709), Grade 36, unless otherwise specified.	Standard Specifications 609-2.03
14.		Satisfactory material is encountered during the drilling of the shaft (stratum is the same as indicated on the boring logs).	Construction Manual 105.11 Standard Specifications 609-3.03
15.		All loose material is satisfactorily removed from the bottom of the shaft in accordance with the approved plan prior to placement of the reinforcing steel cage.	Construction Manual 105.11 Standard Specifications 609-3.03
16.		Adequate survey offset points have been set to allow for checking of the center axis of the hole and rebar cage locations.	Standard Specifications 609-3.03
17.		Adjacent shafts, unless separated by a minimum of three shaft diameters, are not drilled until the concrete in the first shaft has been in place for a minimum of 48 hours.	Standard Specifications 609-3.03
18.		Open excavations are covered at the end of each shaft per the approved safety plan.	Standard Specifications 107.08
19.		A Reinforcing steel quantlist has been completed.	Construction Bulletin 07-01
20.		Reinforcing steel cage was picked per the approved plan and set in drill shaft.	Standard Specifications 609-1.03

21.		Concrete placement is started within 24 hours after completion of the shaft excavation or the same day the excavation is completed.	Standard Specifications 609-3.07 (A)
22.		Tremie downpipes are steel with an inside diameter of at least 10 inches for shafts four feet or greater in diameter.	Standard Specifications 609-3.07 (A)
23.		The inside diameter of the pump pipe is at least 5 inches.	Standard Specifications 609-3.07 (A)
24.		All necessary arrangements shall be made to assure the uninterrupted delivery of concrete so that all drilled shaft foundations will be constructed without cold joints.	Standard Specifications 609-3.07 (A)
25.		During concrete placement, from start to finish, the rate of rise of the top of concrete in the drilled shaft shall be at least 40 feet per hour.	Standard Specifications 609-3.07 (A)
26.		Unless otherwise specified, the slump is 5 inches +/- 1 inch, or as per approved mix design.	Standard Specifications 609-3.07 (A)
27.		Concrete placed by free fall does not strike the sidewalls of the excavation.	Standard Specifications 609-3.07 (B)
28.		A Concrete quantlist has been completed.	Construction Bulletin 07-01
29.		The concrete is vibrated in the top 10 feet of the shaft.	Standard Specifications 609-3.07 (B)
30.		An approved curing method is applied to the concrete immediately after completion of finishing the top of the drilled shaft.	Standard Specifications 1006-6.01 (A)
31.		A Concrete Curing quantlist has been completed.	Construction Bulletin 07-01
32.		Quantlist Minimum Frequency is being followed, once a week.	Construction Bulletin 07-01