



CITY OF PHOENIX

STREET TRANSPORTATION DEPARTMENT
DESIGN & CONSTRUCTION MANAGEMENT DIVISION
MATERIALS LAB

CITY OF PHOENIX COMPACTION REQUIREMENTS

2024 City of Phoenix Supplements to 2023 MAG

Trench Excavating, Backfilling and Compaction City Supplement Table 601-3

% Moisture +2% to -2 % Optimum Moisture (City Supplement 601.3.2)

City Supplement Table 601-3				
Minimum Density Required for Trench Backfill				
Backfill Type	Location	Surface to 2' Below Surface	From 2' Below Surface to Top of Initial Backfill	Haunching and Initial Backfill
I	Under any existing or proposed pavement, curb, gutter, sidewalk, manhole or such construction included in the right-of-way and/or when any part of the trench excavation is within 2' of the above.	100% for Granular 100% for Non-Granular	95%	95%
II	On any utility easement, street, road or alley right-of-way outside limit (I)	95%	95%	95%
III	Around any structures or exposed utilities	95% in all cases		

Native Subgrade , City of Phoenix Supplement 301

% Moisture +2 to -2 % Optimum Moisture (301.3)

301.3 Relative Compaction

(A) Street Pavement Section

- (1) Top 6" Subgrade (under ABC) 100% for Arterial Streets/Major Streets
- (2) Top 6" Subgrade (under ABC) 95% for Collector/Local Streets
- (3) Top 6" Subgrade (under Asphalt/Concrete) 100%

(B) Sidewalks, Curbs, Gutters, ADA Ramps, Driveways, Driveway Entrances.....

- 95%
- (1) Marginally Expansive (340.3.1)..... 90% (Optimum to +3)
- (2) Expansive..... Treat or Remove & Replace

(C) Manholes (Surface to 2' Below Surface)

- 100% (City Supplement Table 601-3 2015)
- (1) Manholes (Under and Around) 95% (City Supplement Table 601-3 2015)

Untreated Base, (ABC) City of Phoenix Supplement 310

% Moisture +2 to -2 % Optimum Moisture (310.3)

(A) Below Asphalt Concrete Pavement..... 100%

(B) Below Portland Cement Concrete Pavement, Driveways, Curb & Gutter, Sidewalks and Roadway Shoulders..... 95%

(C) All Other Areas Not Subject to Vehicular Traffic..... 95%

Asphaltic Concrete Paving City of Phoenix Supplement 321, 325, and 326

Asphalt Base Course, Intermediate and Surface Course Material..... 92-96% of Theoretical Maximum Density

Volumetric values used for compaction shall be confirmed by the Materials Lab prior to compaction testing.

(Asphalt cores required to check gauge calibration and/or at inspectors request) MAG 321.10.1

Table 321-1.1 Asphalt Concrete Mix Temperature at Production Plant		
Type of Asphalt	Minimum Temperature °F	Maximum Temperature °F
Conventional Asphalt (1/2", 3/4")	285	325
Polymer Modified Asphaltic Concrete	290	345

For all pavement surface courses, the surface temperature on which the course is to be placed, shall be a minimum 50 °F and rising. (City Supplement 321.3 and 326.3)

These requirements are for **most** City of Phoenix Projects. Check individual project plans/specs for job specific requirements.