



Entech Engineering
505 Elkton Dr.
Colorado Springs, CO 80907
Phone: 719-531-5599

Soil Density Report

Client:

Hammers Construction, Inc.
1411 Woolsey Heights
Colorado Springs, CO 80915

Project:

241718
Cathedral Rock Church - 846 Struthers Ranch Rd
Cathedral Rock Church - 846 Struthers Ranch Rd
Colorado Springs, CO

Test Results

Subject / Overall Test #	Test Location	Elevation (feet)	Reference	Test Date	Proctor ID	In Place Moist. (%)	In Place Dry Density (pcf)	Percent Comp.	Min Comp. (%)	Opt. Moisture Tolerance (%)	Rem. Code	Retest Of	Field Tech
1 / 1	Building Pad: 15' north & 3' west of the southeast corner of excavation.	1.5	Below Grade	06/30/2025	P1	7.2	122.2	95	95	-2 / 2	DPMP		RL
2 / 2	Building Pad: 3' north & 25' west of the southeast corner of excavation.	1.5	Below Grade	06/30/2025	P1	7.1	127.7	99	95	-2 / 2	DPMP		RL
3 / 3	Building Pad: 20' north & 3' east of the southwest corner of excavation.	1.5	Below Grade	06/30/2025	P1	5.8	126.4	98	95	-2 / 2	DPMP		RL
4 / 4	Building Pad: 3' south & 35' east of the northwest corner of excavation.	1.5	Below Grade	06/30/2025	P1	9.1	122.8	95	95	-2 / 2	DPMP		RL
11 / 5	Building Pad: 50' west & 6' north of the southeast corner of footing excavation.	-	At Grade	07/01/2025	P1	8.4	122.3	95	95	-2 / 2	DPMP		KH
10 / 6	Building Pad: 25' north & 4' east of the southwest corner of the footing excavation.	-	At Grade	07/01/2025	P1	10.3	118.1	92	95	-2 / 2	DF/MF		KH
12 / 7	Building Pad: 60' east & 5' south of the northwest corner of the footing excavation	-	At Grade	07/01/2025	P1	7.3	121.6	95	95	-2 / 2	DPMP		KH
5 / 8	Building Pad: 10' north & 5' east of the southwest corner of excavation.	-	At Grade	07/07/2025	P1	6.4	123.4	96	95	-2 / 2	DPMP	6	RL
6 / 9	Building Pad: 15' south & 5' east of the northwest corner of excavation.	-	At Grade	07/07/2025	P1	7.7	129.4	101	95	-2 / 2	DPMP		RL
7 / 10	Building Pad: 30' south & 50' east of the northwest corner of the building, center pad at gridline 5. (Bottom of overex scarify & recompact, interior pads).	4	Below Grade	07/08/2025	P1	5.5	122.3	95	95	-2 / 2	DPMP		RL
8 / 11	Building Pad: 30' south & 50' east of the northwest corner of the building, center pad at gridline 5. (Overex for interior pads).	2	Below Grade	07/08/2025	P1	8.9	125.9	98	95	-2 / 2	DPMP		RL

Remarks

DP/MP : Density Pass / Moisture Pass
DF/MF : Density Fail / Moisture Fail

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.



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Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P1	ASTM D1557 - A	SM	7.3	128.7
P1	ASTM D1557 - A	SM		

07/17/2025

Reviewed by: Joey Goode, PE



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9 / 12	Building Pad: 30' south & 45' west of the northeast corner of excavation.	-	At Grade	07/09/2025	P1	7.7	122.0	95	95	-2 / 2	DPMP		RL

Remarks

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Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P1	ASTM D1557 - A	SM	7.3	128.7

07/19/2025

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1 / 13	Foundation Backfill: 14' west & 11' north of the southeast corner of the foundation (interior).	1	Below Grade	08/06/2025	P1	5.3	122.0	95	95	-2 / 2	DPMP		BW
2 / 14	Foundation Backfill: 60' west & 31' north of the southeast corner of the foundation (interior).	1	Below Grade	08/06/2025	P1	7.1	123.2	96	95	-2 / 2	DPMP		BW
3 / 15	Foundation Backfill: 70' east & 17' north of the southwest corner of the foundation (interior).	1	Below Grade	08/06/2025	P1	6.1	121.6	95	95	-2 / 2	DPMP		BW
4 / 16	Foundation Backfill: 85' east & 11' south of the northwest corner of the foundation (interior).	1	Below Grade	08/06/2025	P1	9.3	121.8	95	95	-2 / 2	DPMP		BW
5 / 17	Foundation Backfill: 27' west & 15' south of the northeast corner of the foundation (interior).	1	Below Grade	08/06/2025	P1	7.9	122.2	95	95	-2 / 2	DPMP		BW
6 / 18	Foundation Backfill: 15' west & 20' north of the southeast corner of the foundation (interior).	-	At Grade	08/07/2025	P3	8.2	122.6	97	95	-2 / 2	DPMP		DB
7 / 19	Foundation Backfill: 10' south & 20' west of the foundation (interior).	-	At Grade	08/07/2025	P3	9.1	119.6	95	95	-2 / 2	DPMP		DB
8 / 20	Foundation Backfill: 20' south & 60' west of the foundation (interior).	-	At Grade	08/07/2025	P3	8.9	122.7	98	95	-2 / 2	DPMP		DB
9 / 21	Foundation Backfill: 20' north & 30' east of the southwest corner of the foundation (interior).	1	Below Grade	08/07/2025	P3	8.2	120.6	96	95	-2 / 2	DPMP		DB
10 / 22	Foundation Backfill: 20' south & 30' east of the northwest corner of the foundation (interior).	1	Below Grade	08/07/2025	P3	9.9	119.6	95	95	-2 / 2	DPMP		DB
11 / 23	Foundation Backfill: 20' north & 40' east of the southwest corner of the building (interior).	-	At Grade	08/08/2025	P3	8.9	119.6	95	95	-2 / 2	DPMP		DB
12 / 24	Foundation Backfill: 30' east & 20' south of the northwest corner of the building (interior).	-	At Grade	08/08/2025	P3	9.1	122.3	97	95	-2 / 2	DPMP		DB
13 / 25	Foundation Backfill: 45' east & 20' south of the northwest corner of the building (interior).	-	At Grade	08/08/2025	P3	9.7	124.3	99	95	-2 / 2	DPMP		DB

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Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P1	ASTM D1557 - A	SM	7.3	128.7
P3	ASTM D1557 - A	SM	8	125.9

A handwritten signature in blue ink, appearing to read "Joey Goode".

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1 / 26	Water: Main, STA 4 + 00.	2	Below Grade	08/14/2025	P2	8.3	124.1	97	95	-2 / 2	DPMP		DB
2 / 27	Water: Main, STA 4 + 00.	-	At Grade	08/14/2025	P2	8.9	122.7	95	95	-2 / 2	DPMP		DB
3 / 28	Water: Main, STA 4 + 00.	4	Below Grade	08/14/2025	P1	9.1	121.6	95	95	-2 / 2	DPMP		DB
4 / 29	Water: Hydrant, STA 1 + 45.	4	Below Grade	08/22/2025	P2	2.4	110.6	86	95	-2 / 2	DF/MF		DB
5 / 30	Water: Valve cluster, STA 1 + 45.	4	Below Grade	08/22/2025	P2	7.0	122.3	95	95	-2 / 2	DPMP		DB
6 / 31	Water: Hydrant, STA 1 + 45.	4	Below Grade	08/22/2025	P2	7.2	125.8	98	95	-2 / 2	DPMP	29	DB
7 / 32	Water: Main, STA 1 + 20.	4	Below Grade	08/22/2025	P2	5.8	124.5	97	95	-2 / 2	DPMP		DB
8 / 33	Water: STA 1 + 45.	4	Below Grade	08/22/2025	P2	7.4	122.3	95	95	-2 / 2	DPMP		RL
9 / 34	Water: Hydrant, STA 1 + 45.	4	Below Grade	08/22/2025	P2	7.6	121.7	95	95	-2 / 2	DPMP		RL
10 / 35	Water: Valves, STA 1 + 45.	2	Below Grade	08/22/2025	P2	6.4	125.7	98	95	-2 / 2	DPMP		RL
11 / 36	Water: Hydrant, STA 1 + 45.	2	Below Grade	08/22/2025	P2	7.0	125.7	98	95	-2 / 2	DPMP		RL

Remarks

DP/MP : Density Pass / Moisture Pass
DF/MF : Density Fail / Moisture Fail

Comments

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Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P2	ASTM D1557 - A	SM	6.9	128.6
P1	ASTM D1557 - A	SM	7.3	128.7



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1 / 37	Sanitary Sewer: STA 11 + 90.	2	Below Grade	09/04/2025	P1	6.9	123.4	96	95	-2 / 2	DPMP		MS
2 / 38	Sanitary Sewer: STA 12 + 60.	-	At Grade	09/04/2025	P1	6.3	124.1	96	95	-2 / 2	DPMP		MS
3 / 39	Sanitary Sewer: STA 11 + 00.	2	Below Grade	09/04/2025	P1	9.0	123.2	96	95	-2 / 2	DPMP		MS

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Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P1	ASTM D1557 - A	SM	7.3	128.7

09/15/2025

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1 / 40	Storm Water: STA 4 + 00.	2	Below Grade	09/24/2025	P1	9.0	122.2	95	95	-2 / 2	DPMP		RL
2 / 41	Storm Water: STA 3 + 50.	-	At Grade	09/24/2025	P1	6.9	123.8	96	95	-2 / 2	DPMP		RL
3 / 42	Storm Water: STA 4 + 10.	2	Below Grade	09/25/2025	P1	10.3	119.2	93	95	-2 / 2	DF/MF		RL
4 / 43	Storm Water: STA 4 + 20.	2	Below Grade	09/25/2025	P1	5.4	120.4	94	95	-2 / 2	DFMP	42	RL
5 / 44	Storm Water: STA 4 + 10.	2	Below Grade	09/26/2025	P1	6.8	122.5	95	95	-2 / 2	DPMP	43	RL

Remarks

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DF/MF : Density Fail / Moisture Fail
DF/MP : Density Fail / Moisture Pass

Comments

Tests are "Direct Transmission" (Method A). Gauge calibration data on file with the testing Agency.

Proctor Data

Proctor ID	Method	Soil Classification	Optimum Moisture (%)	Maximum Dry Density (pcf)
P1	ASTM D1557 - A	SM	7.3	128.7

10/07/2025

Reviewed by: Joey Goode, PE