

CLIENT: Ludlow Construction Co., Inc.

19 Carmelina's Circle Ludlow, MA 01056 Attn: Mr. Mike Pio **PROJECT:** Durham Meadows Waterline

Durham, CT

DATE: April 29, 2020 **REPORT #:** 19-75-012-050 Page 1 of 5

General Location: South Main Street (Route 17), Waterline Trench (Station #172+40 (30) - Station #174+15)

Field Rep: Stephen Devlin

General Contractor: Ludlow Construction Co., Inc. **Earthwork Contractor:** Ludlow Construction Co., Inc.

Air Temp:50°FWeather:ClearSoil ID#:3519-592

Soil Type: Light Gray Gravel w/ Sand & Silt

Proctor Sample Source: Haynes Group

Proctor Value: 141.4 lbs/ft³ Optimum Moisture: 4.6% Gauge Type: Troxler 3430 Required Compaction: 95.0%

TEST DEPTH/ELEV. MOISTURE **DRY DENSITY COMPACTION** NUMBER (in/ft) (%) (pcf) (%) 6"/ 3.5' BFG 2.4% 1 137.5 97.2% LOCATION: Station #172+50 2 6"/ 2' 8" BFG 3.2% 135.6 95.9% Station #172+60 LOCATION: 97.0% 3 6"/ 2.0' BFG 2.2% 137.1 LOCATION: Station #172+45 137.1 4 6"/ 3.5' BFG 2.8% 97.0% LOCATION: Station #172+75 6"/ 2' 8" BFG 3.1% 135.0 95.5% LOCATION: Station #172+70 6"/ 2.0' BFG 4.0% 137.6 97.3% Station #172+85 LOCATION: 6"/ 3.5' BFG 2.9% 136.5 96.5% LOCATION: Station #172+95 6"/ 2' 8" BFG 2.7% 136.9 96.8% LOCATION: Station #173+05



CLIENT: Ludlow Construction Co., Inc.

19 Carmelina's Circle Ludlow, MA 01056 Attn: Mr. Mike Pio **PROJECT:** Durham Meadows Waterline

Durham, CT

DATE: April 29, 2020 **REPORT #:** 19-75-012-050 Page 2 of 5

General Location: South Main Street (Route 17), Waterline Trench (Station #172+40 (30) - Station #174+15)

Field Rep: Stephen Devlin

General Contractor: Ludlow Construction Co., Inc. **Earthwork Contractor:** Ludlow Construction Co., Inc.

Air Temp:50°FWeather:ClearSoil ID#:3519-592

Soil Type: Light Gray Gravel w/ Sand & Silt

Proctor Sample Source: Haynes Group

Proctor Value: 141.4 lbs/ft³ Optimum Moisture: 4.6% Gauge Type: Troxler 3430 Required Compaction: 95.0%

TEST DEPTH/ELEV. MOISTURE DRY DENSITY **COMPACTION NUMBER** (in/ft) (%) (pcf) (%) 6"/ 2.0' BFG 2.9% 9 139.1 98.4% LOCATION: Station #173+10 10 6"/ 3.5' BFG 3.8% 135.3 95.7% Station #173+30 LOCATION: 11 6"/ 2' 8" BFG 2.7% 136.2 96.3% LOCATION: Station #173+15 12 6"/ 2.0' BFG 2.6% 139.3 98.5% LOCATION: Station #173+35 6"/3.5' BFG 3.8% 135.9 13 96.1% LOCATION: Station #173+50 6"/ 2' 8" BFG 2.7% 137.6 97.3% 14 Station #173+45 LOCATION: 15 6"/ 2.0' BFG 2.2% 138.3 97.8% LOCATION: Station #173+65 16 6"/ 3.5' BFG 2.7% 136.8 96.7% LOCATION: Station #173+80



CLIENT: Ludlow Construction Co., Inc.

> 19 Carmelina's Circle Ludlow, MA 01056 Attn: Mr. Mike Pio

PROJECT: **Durham Meadows Waterline**

Durham, CT

DATE: April 29, 2020

REPORT #: 19-75-012-050 Page 3 of 5

General Location: South Main Street (Route 17), Waterline Trench (Station #172+40 (30) - Station #174+15)

Field Rep: Stephen Devlin

General Contractor: Ludlow Construction Co., Inc. **Earthwork Contractor:** Ludlow Construction Co., Inc.

Air Temp: 50°F Weather: Clear Soil ID#: 3519-592

Soil Type: Light Gray Gravel w/ Sand & Silt

Proctor Sample Source: Haynes Group

lbs/ft³ **Proctor Value:** 141.4 **Optimum Moisture:** 4.6% Troxler 3430 **Required Compaction:** 95.0% Gauge Type:

TEST DEPTH/ELEV. MOISTURE **DRY DENSITY COMPACTION NUMBER** (in/ft) (%) (pcf) (%) 6"/ 2' 8" BFG 2.9% 17 134.5 95.1% LOCATION: Station #173+70 18 6"/ 2.0' BFG 2.4% 136.5 96.5% Station #173+85 LOCATION: 6"/3.5' BFG 95.3% 19 2.6% 134.8 LOCATION: Station #174+05 20 6"/ 2' 8" BFG 2.2% 136.2 96.3% LOCATION: Station #174+00 6"/ 2.0' BFG 1.9% 136.0 96.2% 21 LOCATION: Station #173+95 LOCATION: LOCATION: LOCATION:



CLIENT: Ludlow Construction Co., Inc.

19 Carmelina's Circle Ludlow, MA 01056 Attn: Mr. Mike Pio **PROJECT:** Durham Meadows Waterline

Durham, CT

DATE: April 29, 2020 **REPORT #:** 19-75-012-050 Page 4 of 5

General Location: South Main Street (Route 17), Waterline Trench (Station #172+40 (30) - Station #174+15)

Field Rep: Stephen Devlin

General Contractor: Ludlow Construction Co., Inc. **Earthwork Contractor:** Ludlow Construction Co., Inc.

Air Temp: 50°F
Weather: Clear
Soil ID#: 3519-608

Soil Type: Light Gray Gravel w/ Silt & Sand (1.5" Gravel)

Proctor Sample Source: Haynes Group

Proctor Value: 138.9 lbs/ft³ Optimum Moisture: 7.8% Gauge Type: Troxler 3430 Required Compaction: 95.0%

| TEST | DEPTH/ELEV. | MOISTURE | DRY DENSITY | COMPACTION | | |
|-----------|-----------------|----------|-------------|------------|--|--|
| NUMBER | (in/ft) | (%) | (pcf) | (%) | | |
| 22 | 6"/ 18" BFG | 2.7% | 135.2 | 97.3% | | |
| LOCATION: | Station #172+55 | | | | | |
| 23 | 6"/ 4" BFG | 2.2% | 134.2 | 96.6% | | |
| LOCATION: | Station #172+50 | | | | | |
| 24 | 6"/ 18" BFG | 2.3% | 134.7 | 97.0% | | |
| LOCATION: | Station #172+85 | | | | | |
| 25 | 6"/ 4" BFG | 2.0% | 138.3 | 99.6% | | |
| LOCATION: | Station #172+70 | | | | | |
| 26 | 6"/ 18" BFG | 2.5% | 137.3 | 98.8% | | |
| LOCATION: | Station #173+00 | | | | | |
| 27 | 6"/ 4" BFG | 2.7% | 137.6 | 99.1% | | |
| LOCATION: | Station #173+15 | | | | | |
| 28 | 6"/ 18" BFG | 3.4% | 136.6 | 98.3% | | |
| LOCATION: | Station #173+20 | | | | | |
| 29 | 6"/ 4" BFG | 3.3% | 136.1 | 98.0% | | |
| LOCATION: | Station #173+35 | | | | | |



CLIENT: Ludlow Construction Co., Inc.

19 Carmelina's Circle Ludlow, MA 01056 Attn: Mr. Mike Pio **PROJECT:** Durham Meadows Waterline

Durham, CT

DATE: April 29, 2020

0 **REPORT #:** 19-75-012-050 Page 5 of 5

General Location: South Main Street (Route 17), Waterline Trench (Station #172+40 (30) - Station #174+15)

Field Rep: Stephen Devlin

General Contractor: Ludlow Construction Co., Inc. **Earthwork Contractor:** Ludlow Construction Co., Inc.

Air Temp: 50°F
Weather: Clear
Soil ID#: 3519-608

Soil Type: Light Gray Gravel w/ Silt & Sand (1.5" Gravel)

Proctor Sample Source: Haynes Group

Proctor Value: 138.9 lbs/ft³ Optimum Moisture: 7.8%

Gauge Type: Troxler 3430 **Required Compaction:** 95.0%

| TEST | DEPTH/ELEV. | MOISTURE | DRY DENSITY | COMPACTION | | |
|-----------|-----------------|----------|-------------|------------|--|--|
| NUMBER | (in/ft) | (%) | (pcf) | (%) | | |
| 30 | 6"/ 18" BFG | 2.7% | 135.6 | 97.6% | | |
| LOCATION: | Station #173+45 | | | | | |
| 31 | 6"/ 4" BFG | 2.5% | 136.0 | 97.9% | | |
| LOCATION: | Station #174+55 | | | | | |
| 32 | 6"/ 18" BFG | 2.0% | 135.4 | 97.5% | | |
| LOCATION: | Station #173+85 | | | | | |
| 33 | 6"/ 4" BFG | 2.3% | 135.0 | 97.2% | | |
| LOCATION: | Station #173+70 | | | | | |
| 34 | 6"/ 18" BFG | 3.0% | 137.9 | 99.3% | | |
| LOCATION: | Station #174+00 | | | <u> </u> | | |
| 35 | 6"/ 4" BFG | 3.3% | 134.9 | 97.1% | | |
| LOCATION: | Station #174+05 | | | | | |
| | | | | | | |
| LOCATION: | | | | | | |
| | | | | | | |
| LOCATION: | | | | | | |