

CLIENT: Ludlow Construction Co., Inc.

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

Durham, CT

DATE: April 27, 2020 **REPORT #:** 19-75-012-048 Page 1 of 6

General Location: South Main Street (Route 17), Waterline Trench (Station #164+19 - Station #165+69)

Field Rep: Stephen Devlin

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

Air Temp:53°FWeather:ClearSoil ID#:3519-600

Soil Type: Reddish Brown Silty Sand w/ Gravel

Proctor Sample Source: On Site

Proctor Value: 136.3 lbs/ft³ Optimum Moisture: 6.6%
Gauge Type: Troxler 3430 Required Compaction: 95.0%

dauge Type.	TOXICI 5450		ricquired compactio	JJ.070
TEST	DEPTH/ELEV.	MOISTURE	DRY DENSITY	COMPACTION
NUMBER	(in/ft)	(%)	(pcf)	(%)
1	6"/ 3.5' BFG	8.9%	131.4	96.4%
LOCATION:	Station #167+10			
2	6"/ 3.5' BFG	7.0%	131.5	96.5%
LOCATION:	Station #167+40			
3	6"/ 3.5' BFG	7.9%	130.5	95.7%
LOCATION:	Station #167+60			
4	6"/ 3.5' BFG	7.7%	132.6	97.3%
LOCATION:	Station #167+85			
LOCATION:				
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 27, 2020 **REPORT #:** 19-75-012-048 Page 2 of 6

General Location: South Main Street (Route 17), Waterline Trench (Station #164+19 - Station #165+69)

Field Rep: Stephen Devlin

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

Air Temp:53°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' 8" BFG 3.9% 5 138.5 97.9% LOCATION: Station #167+10 6 6"/ 2.0' BFG 3.2% 135.0 95.5% Station #167+20 LOCATION: 7 6"/ 2' 8" BFG 4.1% 136.6 96.6% LOCATION: Station #167+40 8 6"/ 2.0' BFG 4.4% 138.7 98.1% LOCATION: Station #167+35 6"/ 2' 8" BFG 6.5% 136.0 96.2% LOCATION: Station #167+75 6"/ 2.0' BFG 2.8% 136.5 10 96.5% Station #167+60 LOCATION: 6"/ 2' 8" BFG 11 4.6% 135.7 96.0% LOCATION: Station #167+85 12 6"/ 2.0' BFG 3.6% 138.0 97.6% LOCATION: Station #167+95



CLIENT: Ludlow Construction Co., Inc.

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

Durham, CT

DATE: April 27, 2020 **REPORT #:** 19-75-012-048 Page 3 of 6

General Location: South Main Street (Route 17), Waterline Trench (Station #164+19 - Station #165+69)

Field Rep: Stephen Devlin

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

Air Temp:53°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)	(%)
13	6"/ 3.5' BFG	5.1%	138.0	97.6%
LOCATION:	Station #168+20			
14	6"/ 2' 8" BFG	7.9%	135.3	95.7%
LOCATION:	Station #168+15			
15	6"/ 2.0' BFG	4.7%	136.4	96.5%
LOCATION:	Station #168+25			
16	6"/ 3.5' BFG	3.6%	135.3	95.7%
LOCATION:	Station #168+50			
17	6"/ 2' 8" BFG	2.9%	136.3	96.4%
LOCATION:	Station #168+40			
18	6"/ 2.0' BFG	3.3%	137.6	97.3%
LOCATION:	Station #168+35			
19	6"/ 3.5' BFG	3.7%	137.2	97.0%
LOCATION:	Station #168+60			
20	6"/ 2' 8" BFG	3.8%	135.4	95.8%
LOCATION:	Station #168+70			



CLIENT: Ludlow Construction Co., Inc.

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

Durham, CT

DATE: April 27, 2020 **REPORT #:** 19-75-012-048 Page 4 of 6

General Location: South Main Street (Route 17), Waterline Trench (Station #164+19 - Station #165+69)

Field Rep: Stephen Devlin

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

Air Temp:53°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)	(%)
21	6"/ 3.5' BFG	3.5%	135.0	95.5%
LOCATION:	Station #168+75			
22	6"/ 2' 8" BFG	3.8%	139.4	98.6%
LOCATION:	Station #168+95			
23	6"/ 2.0' BFG	3.5%	136.6	96.6%
LOCATION:	Station #168+85			
24	6"/ 3.5' BFG	3.6%	134.9	95.4%
LOCATION:	Station #169+00			
LOCATION:				
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 27, 2020 **REPORT #:** 19-75-012-048 Page 5 of 6

General Location: South Main Street (Route 17), Waterline Trench (Station #164+19 - Station #165+69)

Field Rep: Stephen Devlin

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

Air Temp: 53°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) (%) 6"/ 18" BFG 3.7% 25 136.7 98.4% LOCATION: Station #167+25 26 6"/ 4" BFG 3.3% 135.4 97.5% LOCATION: Station #167+10 97.3% 27 6"/ 4" BFG 4.3% 135.1 LOCATION: Station #167+35 28 6"/ 4" BFG 3.4% 134.8 97.0% LOCATION: Station #167+45 6"/18" BFG 3.3% 136.7 29 98.4% LOCATION: Station #167+65 6"/4" BFG 2.9% 134.1 30 96.5% Station #167+70 LOCATION: 31 6"/ 18" BFG 3.0% 137.2 98.8% LOCATION: Station #167+85 32 6"/ 4" BFG 2.7% 137.5 99.0% LOCATION: Station #168+00



CLIENT: Ludlow Construction Co., Inc.

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

Durham, CT

DATE: April 27, 2020 **REPORT #:** 19-75-012-048 Page 6 of 6

General Location: South Main Street (Route 17), Waterline Trench (Station #164+19 - Station #165+69)

Field Rep: Stephen Devlin

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

Air Temp: 53°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)	(%)	
33	6"/ 18" BFG	3.4%	136.7	98.4%	
LOCATION:	Station #168+20				
34	6"/ 4" BFG	3.9%	138.8	99.9%	
LOCATION:	Station #168+15				
35	6"/ 4" BFG	3.4%	136.0	97.9%	
LOCATION:	Station #168+40				
36	6"/ 4" BFG	3.3%	137.0	98.6%	
LOCATION:	Station #168+50				
37	6"/ 18" BFG	4.4%	132.2	95.2%	
LOCATION:	Station #168+75				
38	6"/ 4" BFG	3.7%	138.9	100.0%	
LOCATION:	Station #168+70				
39	6"/ 18" BFG	3.0%	135.7	97.7%	
LOCATION:	Station #169+00				
40	6"/ 4" BFG	3.1%	133.4	96.0%	
LOCATION:	Station #168+90				