

## Daily Report

<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	1 of 17

### Weather Conditions

**Conditions:** Daylight hours. Sunny, 90%-100% cloud cover, winds variable 5-15 mph.  
**Temperature (°F):** High 55°F Low 27°F

Contractors & Subcontractors Workforce					Equipment in Use							
Trade	#	x	hrs		Trade	#	x	hrs	Type	#	x	hrs
USACE					Ludlow Construction				Concrete/Asphalt Road Saw	0	x	8
Field Engineer	1	x	8		Superintendent	1	x	8	Dump truck	4	x	8
					Safety Officer	1	x	8	Excavator - Large	1	x	8
					Foreman	1	x	8	Excavator - Mid-Size	1	x	8
					Dump truck Operator	2	x	8	Excavator - Rubber Wheeled – Rock Hammer	1	x	8
					Excavator Operator	2	x	8	Skid Steer / Bucket Loader	1	x	8
					Skid Steer/Bucket Loader Op.	1	x	8	Rolling Compactor	1	x	8
					Laborers	4	x	8	Plate Compactor	1	x	8
					<i>Total 9 persons + 1 sub. Trucker</i>				Jumping Jack Compactor	1	x	8
					<i>Note that some persons operate</i>				Street Sweeper (Broce Broom)	1	x	8
					<i>Multiple pieces equipment.</i>				Material Hopper	1	x	8
					Sub-contractor				Pipe saw	0	x	8
					Dump truck Operator	1	x	8	Light Tower	0	x	8
					Middletown Police Dept.							
					Police Officer Detail	1	x	8				

**Visitors:** Steve Dunbar (USACE)  
Ed Hathaway (EPA)

**Notes:**

**Begin at 34+04.62 and End at 33+24.62 – ADJUSTED Distance.** Note: the initial starting point at the junction of Talcott Ridge Dr. and So. Main Street (RTE. 17) was off by 4.83 feet. Initially on October 7, 2019 the starting point was reported as 51+72, however, after a review by Ludlow, that distance should have been 51+76.83. Moving forward the distance will be adjusted, however, Stations reported in Daily Daytime reports from October 7 through 29, 2019 will be off by 4.83 feet as reported. That means 4.83 will have to be added (0+4.83) to all stations during this time frame. As always, distance counts down as one proceeds up Talcott Ridge Dr. toward the cul-de-sac. Distance is also by length of pipe, not “road distance”.

**Road Distance vs. Pipe distance:** This has been an on-going issue compounded by the direction the station numbers are laid out (i.e. counting down as one proceeds up Talcott Ridge Drive. Ludlow, to their credit, has been keeping major junctions on track (e.g. 12” main T, hydrant T’s, Watch Hill Dr. T’s, etc...) placing them in correct locations despite the seeming mismatch in numbers. Just as a point of clarification, The difference in numbers is related to the physical track of the pipe, which is not strait and level as the road distance shown on plan. Both vertical pitch and horizontal deflection/bends attribute to the distance. As of the starting station this morning “pipe” distance was at station 34+04.62 which compares to “road” distance station of 34+11. Essentially, major junctions are placed by road distance, but daily measurements are by pipe distance (length).

**Pipe Connections:** Restrained pipe connections were used on the first 3 pipes installed today ending at station 33+44.62. The final pipe installation was unrestrained. Unrestrained will return to restrained piping just before pipe size increases to 20” DI at road station 31+84.

**Compaction Testing:** No Compaction testing today.

0730 – On-site. Just finishing with first section of 16” DI to station 33+84.62. Bedrock is slowing the process.

**Res. Representative:**

W. Abrahams-Dematte

**Date:** 11/07/19

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<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	2 of 17

0845 – Setting second stick of restrained 16” DI to station 33+64.62. Site visitors today, pre-weekly meeting.

1030 – Break time. Progress slowed by rising bedrock in the trench. Wheeled excavator fitted with a Ram hammer was needed to break up bedrock for removal where the large excavator failed to be able to dig out directly. Also a water service line crossing had to also be dug and hammered around.

1200 – Trench is nearly out to 40 feet. Bedrock taken out from under 1-1.5 inch water service line. Bedrock appears to be an arkose from the Portland Arkose formation.

1220 – Installing 3<sup>rd</sup> stick of restrained 16” DI to 33+44.62. The next roughly 80 feet will be unrestrained pipe.

1310 – Setting 4<sup>th</sup> and final stick, this time unrestrained 16” DI to final station 33+24.62. Bedrock was a considerable time slow down. Depth to bedrock was anywhere from 8 feet to 2 feet. A very rough estimate of volume assuming a 4 foot wide trench would be about 60 yards, however, in discussion with Billy (Ludlow) he will have numbers tomorrow for quantity excavated.

1330 –Off site.

### Payment Items:

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<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	3 of 17



Figure 1 – Facing south-southwest. 8”-DI pipeline up lower Watch Hill Drive to new hydrant.



## Daily Report

**Project:** Durham Meadows Pipeline Installation  
**Location:** Talcott Ridge Drive, Middletown CT  
**Project #:** AECOM: 60445033  
**Contractor:** Ludlow Construction

**Date:** November 07, 2019  
**Day of Week:** Thursday  
**Report No:** 26  
**Page:** 4 of 17



Figure 2 – Facing south – New hydrant installation on lower Watch Hill Drive.



## Daily Report

<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	5 of 17



Figure 3 – Facing northwest. New hydrant installation on Talcott Ridge Dr. at intersection with upper Watch Hill Dr. (not shown but located to the left of this shot).

## Daily Report

<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	6 of 17



Figure 4 – Facing southwest, road closure sign. Upper Watch Hill Drive to the right of this shot.



## Daily Report

**Project:** Durham Meadows Pipeline Installation  
**Location:** Talcott Ridge Drive, Middletown CT  
**Project #:** AECOM: 60445033  
**Contractor:** Ludlow Construction

**Date:** November 07, 2019  
**Day of Week:** Thursday  
**Report No:** 26  
**Page:** 7 of 17



Figure 5 – Sidewalk closure sign. Photo taken facing south.

## Daily Report

<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	8 of 17



Figure 6 – Setting pipe. Note position of silver rings on pipe. This indicates that the pipe has not yet been fully seated into bell to right.



## Daily Report

**Project:** Durham Meadows Pipeline Installation  
**Location:** Talcott Ridge Drive, Middletown CT  
**Project #:** AECOM: 60445033  
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**Date:** November 07, 2019  
**Day of Week:** Thursday  
**Report No:** 26  
**Page:** 9 of 17



Figure 7 – Facing north. Lift compaction with Wacker plate compactor. Upper Watch Hill Drive seen in background to left.

## Daily Report

<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	10 of 17



Figure 8 – Mark out for cross over from 16” to 20” DIP. Will not likely be reached by end of week given issues with solid bedrock and a number of utility crossings between current location and here.

<b>Res. Representative:</b>	W. Abrahams-Dematte	<b>Date:</b>	11/07/19
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**Project:** Durham Meadows Pipeline Installation  
**Location:** Talcott Ridge Drive, Middletown CT  
**Project #:** AECOM: 60445033  
**Contractor:** Ludlow Construction

**Date:** November 07, 2019  
**Day of Week:** Thursday  
**Report No:** 26  
**Page:** 11 of 17



**Figure 9 – Ram hammer used to break up bedrock for removal. Process often requires a widening of the trench to be able excavate the width to insert the 16” DI.**



## Daily Report

**Project:** Durham Meadows Pipeline Installation  
**Location:** Talcott Ridge Drive, Middletown CT  
**Project #:** AECOM: 60445033  
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**Date:** November 07, 2019  
**Day of Week:** Thursday  
**Report No:** 26  
**Page:** 12 of 17



**Figure 10 – Facing southwest, bedrock encountered at shallow depth along todays run. Scraped trench sides show the extent of bedrock, which starts just under the red unit.**



## Daily Report

**Project:** Durham Meadows Pipeline Installation  
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**Project #:** AECOM: 60445033  
**Contractor:** Ludlow Construction

**Date:** November 07, 2019  
**Day of Week:** Thursday  
**Report No:** 26  
**Page:** 13 of 17



Figure 11 – Hammering rock out from under water service line (seen just in front of shovel).

## Daily Report

<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	14 of 17



Figure 12 – Arkose bedrock encountered. Part of the Portland Arkose Formation.

<b>Res. Representative:</b>	W. Abrahams-Dematte	<b>Date:</b>	11/07/19
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<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	15 of 17



Figure 13 – Road cut mark out for upper Watch Hill Drive replacement hydrant 8” DI line. Photo taken facing west.

## Daily Report

<b>Project:</b>	Durham Meadows Pipeline Installation	<b>Date:</b>	November 07, 2019
<b>Location:</b>	Talcott Ridge Drive, Middletown CT	<b>Day of Week:</b>	Thursday
<b>Project #:</b>	AECOM: 60445033	<b>Report No:</b>	26
<b>Contractor:</b>	Ludlow Construction	<b>Page:</b>	16 of 17



Figure 14 – Broad perspective of today's work. Photo taken facing east.



## Daily Report

**Project:** Durham Meadows Pipeline Installation  
**Location:** Talcott Ridge Drive, Middletown CT  
**Project #:** AECOM: 60445033  
**Contractor:** Ludlow Construction

**Date:** November 07, 2019  
**Day of Week:** Thursday  
**Report No:** 26  
**Page:** 17 of 17



**Figure 15 – Facing south, water service line can be seen just left of the end of the trench box and in the distance, just beyond the end if the final stick of pipe (not yet placed in trench) is the culvert drain line.**