

FIELD OBSERVATION REPORT

Project: Longmeadow Rd & Ole Musket Rd – Drainage Improvements
Client: Town of Cumberland
GP Field Rep: Kassey Northrop (KN)
Weather: Cloudy
Time onsite: 10:15 – 11:15 AM/ 3:30 – 4:15 PM
Contractor: A.H. Grover, Inc.
Distribution: File; Town of Cumberland

GP Project No: 3656
Visit Date: April 5, 2023
Report Date: August 5, 2023
Temp. Range: 35-37°F

Work in Progress

- A.H. Grover, Inc. has installed CB #27 and is continuing to excavate towards proposed CB #26.

Work Conducted by GP Representative

- Review the construction for drainage improvements on Ole Musket Road.

Discussions & Observations

Overall Ole Musket (04/05/22)

- Prior to arrival in the morning, A.H. Grover, Inc. had installed CB #27 on material consistent with ¾" crushed stone and continued the 12 feet of 15" SD pipe installed yesterday to CB #27, resulting in a total of 23.75 feet of 15" SD pipe installed between CB #27 and CB #28. (Photo 1)
 - Rock excavation for the trench area between CB #27 and CB #28, as well as the area for the installment of CB #27 was accounted for yesterday.
- While on site, A.H. Grover, Inc. started excavating the trench area proposed for the 15" Perf. SD between CB's #26 & #27. (Photo 2)
 - Ledge rock continues to be present at depths of approximately 1.5 – 2.5' below existing grade, significantly slowing down production. (Photo 3) A high spot of ledge rock was present around station 17+00, KN to monitor and communicate if high spot continues or deteriorates as excavation continues. (Photo 4) While on site, the homeowner of house #14 stated that his property's subsurface is mostly sand. It is A.H. Grover, Inc's hope that once they move further out of the cul-de-sac, towards Route 88, ledge rock will be less present.
 - Approximately 60 feet of 15" Perf. SD pipe was embedded with material consistent with MDOT 703.22 Type C – ¾" Crushed Stone from CB #27 towards proposed CB #26. (Photo 5) The 40 feet of 15" Perf. SD pipe was then backfilled approximately 1.75 feet from the spring line with material consistent with MDOT 703.22 Type C Crushed Stone.
 - Material consistent with MDOT 703.22 Type B Underdrain was used to backfill the installed pipe area of the trench to the subbase layer. (Photo 6) Approximately 18" of subbase consistent with MDOT 703.06 Type D was installed on the underdrain layer and compacted with a Remote Control RTSC3 Wacker Neuson compactor. A plate compactor was used in between underground utility areas as the space was limited.
 - A.H. Grover, Inc. excavated approximately 10 feet beyond the 60 feet of installed pipe and backfilled that section to begin tomorrow.
- A.H. Grover, Inc. continues to make efforts to avoid the existing underground utilities. Rock excavation and the vibrations could present risk to the underground utilities as they border the trench area. Lee Grover and KN spoke that A.H. Grover, Inc. will continue to take precautions to avoid utilities but if they run into any issues or concerns they will stop and call KN to discuss how to proceed.
- As it was assumed and discussed during the preconstruction meeting on March 23, 2023, due to the condition of the road and the existing alligator cracking, the pavement has fallen apart outside of the trench limits approximately 0.5 – 1.0 feet respectively. (Photo 7) Additional 19mm HMA is anticipated to be needed for these areas.



- The table below reflects the approximate quantities as of the end of the day April 5, 2023:

Item/Description	Units	Quantity to Date (04/05/23)
203.21 - Rock Excavation	CY	67.3
603.169 – 15" Culvert Pipe III	LF	113.75
604.131 – 4' Diameter CB	EA	2
604.161 – Altering Catch Basin	EA	1
605.12 – 15" Underdrain Type C	LF	60

People on Site

- Ben Grover; A.H. Grover, Inc.
➤ Lee Grover; A.H. Grover, Inc.
➤ 3-4 Person Crew; A.H. Grover

Visitors

- Cumberland Public Works

Concerns or Questions

- **Ledge Rock**
➤ **High spot of ledge rock around STA 17+00**

Action Items

- **Communicate with homeowners as needed.**
➤ **Monitor ledge rock, especially high spot around STA 17+00**

Prepared By: Kassey Northrop

Reviewed By: Doug Reynolds, PE

If there are any discrepancies, please notify the sender immediately.



Photos



Photo 1 – CB #27 installed.



Photo 2 – Excavating trench for proposed 15" Perf. SD between CB's #26 & #27



Photo 3 – Ledge rock present, pictured around STA 17+50.



Photo 4 – High spot around STA 17+00



Photo 5 – MDOT 703.22 Type C – $\frac{3}{4}$ " Crushed Stone placed prior to 15" Perf. SD.



Photo 6 – Backfill being installed with material consistent with MDOT 703.22 Type B Underdrain.



Photo 6 – Alligator cracking causing additional existing pavement to break away.