

Date : 03/12/2024
Project No : 2023C180
Client Company : Artisan Communities
Arrival Time : 03/12/2024
Onsite Hours :

ASEC Report ID : 64874
Name of the Project : Lakeside Sub., Calhoun
Project Location : Calhoun
Weather : overcast
Departure Time : 03/12/2024
ASEC Technician Name : Russell Hendrix

As requested, the site was visited by our AS Engineering and Consulting (ASEC) representative for the purpose of providing quality control inspection and testing services. Visual observation techniques were employed to verify compliance with project drawing/specifications, applicable codes, and materials submittals. The following observations were observed on site this day.

Headwall BA1 Bedding: Due to groundwater, approximately 12 inches of No. 57 stone (measuring 6' x 13') was utilized as bedding for the headwall at BA1. The following details the bedding and pipe installation process:

1. Initial Bedding for Headwall:

- A layer of approximately 12 inches of No. 57 stone was used as bedding for the headwall at BA1 to address groundwater concerns.

2. Probe Analysis for Storm Drain Pipe:

- Using a 3/8" diameter probe rod at the first storm drain pipe location (commencing at BA1), it was determined that the depth of soft material with a high moisture level extended 2-3 feet below the surface (soft material was removed).

3. Bedding Adjustment and Pipe Placement:

- Following discussions with ASEC engineering and considering water intrusion concerns, approximately 2-3 feet of No. 57 stone bedding (with varying depth) was placed, starting from the headwall.
- A 48-inch steel corrugated pipe (20 feet in length) was placed and sealed with the headwall.
- A second 20-foot steel corrugated pipe was installed with the same No. 57 stone bedding due to water intrusion.
- A lift size of 4 foot was used. A recommendation was made to remove the 4 feet and backfill with 6-inch compacted lifts. This was refused by the contractor who elected to continue fill placement.

Sanitation Sewer Progress (Between Stations 4.2 and 4.3): Progress continued with the sanitation sewer installation between stations 4.2 and 4.3. The following summarizes the progress and related observations:

1. Sewer Installation Lifts:

- Lifts were approximately 2-3 feet in depth during the sewer installation process. (overly thick lift sizes was discussed with on-site workers).
- Very low compactive effort was used between oversized lifts.

2. Safety Concerns and Discussion:

- No density testing could be completed due to trench safety concerns.

Conclusion: The bedding for Headwall BA1 was adjusted to address groundwater and moisture concerns, with appropriate measures taken for the storm drain pipe placement. Progress also continued with the sanitation sewer installation, albeit with noted disregard to our recommendations regarding lift size and

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compaction.



BA1 Headwall and 20 feet of 48 inch corrugated pipe.



BA1 sealed around pipe



4 feet of fill being placed next to BA1 headwall



4 feet of fill being compacted with a trench packer.

Kenneth Mosman

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